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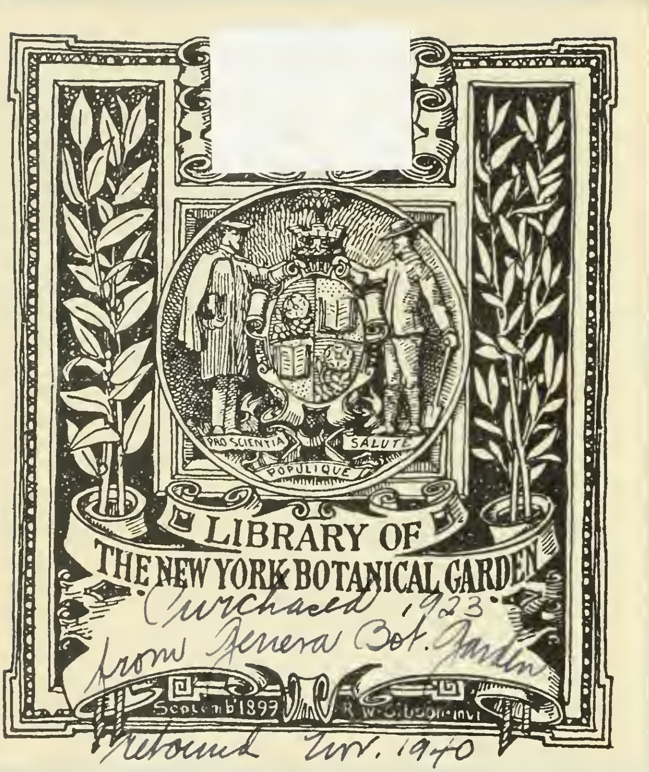
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CONTINUED

BY JOHN LINDLEY, Ph. D. F.R.S. L.S. AND G.S.
PROFESSOR OF BOTANY IN THE UNIVERSITY OF LONDON,
&c. &c. &c.

New Series.
VOL. II.
OR VOL. XV. OF THE ENTIRE WORK.

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Carpitur.

LONDON:
JAMES RIDGWAY, 169, PICCADILLY.

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OF

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OR

VOLUME XV. OF THE WHOLE WORK.

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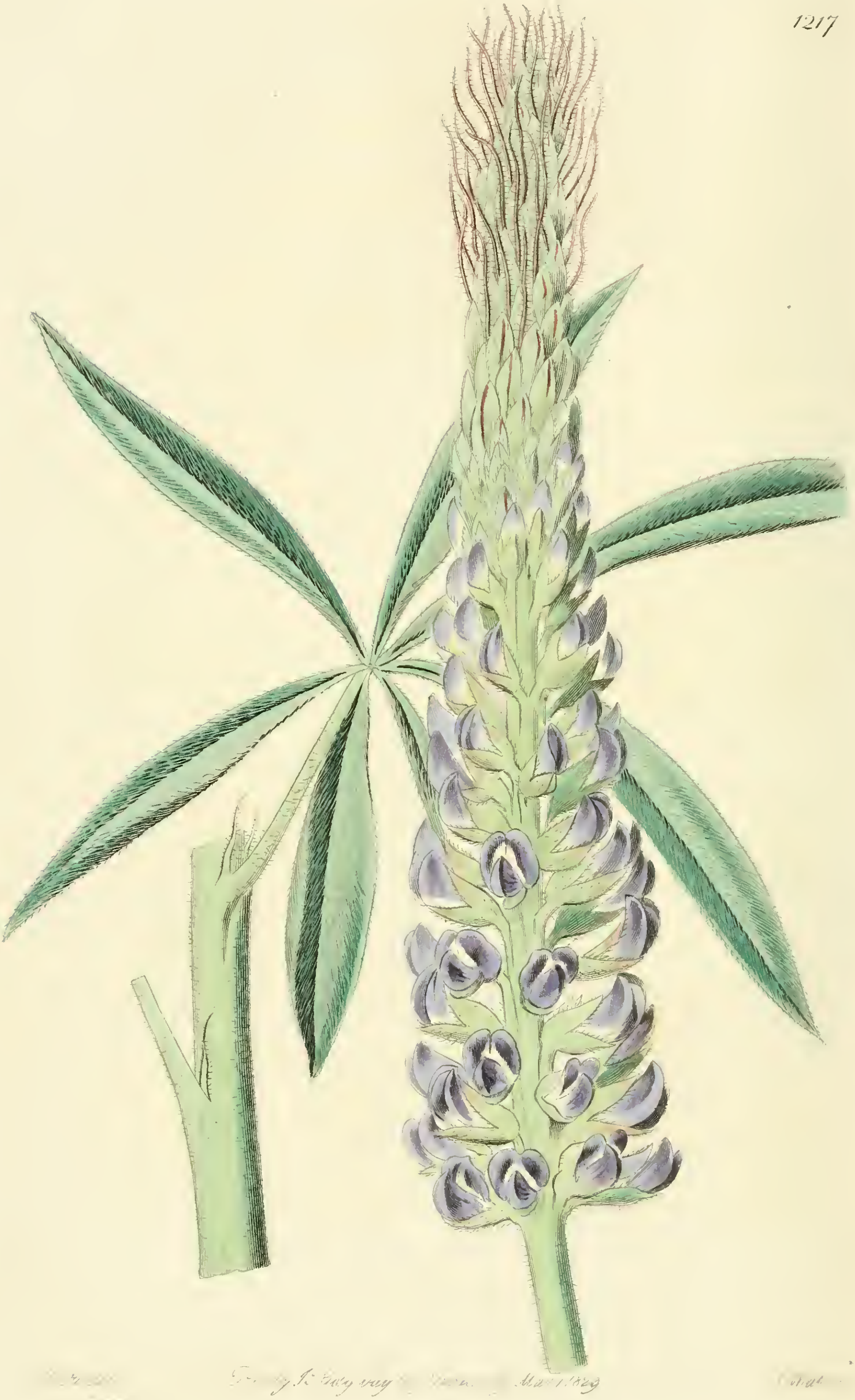

[illegible] J. Ridgway [illegible] Mar 1. 1829

LUPÍNUS* plumósus.

Feathery Perennial Lupine.

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DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ.
LUPINUS.—*Suprà, vol.* 6. *fol.* 457.

L. *plumosus;* perennis, villosissimus, floribus alternis breviter pedicellatis bracteolatis, calycis labio superiore bifido; inferiore integro, foliolis 5-7 lanceolatis, leguminibus glabris 3-5-spermis, bracteis floribus longioribus villosis deciduis. *Douglas journ. ined.*

Caulis 2-4-*pedalis, ramosus, villosissimus, lignosus.* Foliola 5-7, *lanceolata, sericea.* Racemus *pedalis et ultrà.* Flores *alterni, pedicellati.* Calyx *villosus, labio superiore bifido, inferiore integerrimo;* bracteolæ *longissimæ, villosæ, piliformes.* Bracteæ *subulatæ, villosæ, floribus longiores, deciduæ.* Vexillum *amplum, cæruleum;* alæ *et* carina *pallidæ.* Legumen *glabrum,* 3-5-*spermum;* semina *parva, nigro-fusca.* Douglas ined.

"Common in Northern California, in 45° north, growing in gravelly soil: it is also found at the sources of the Walla-wallah river, near the Blue Mountains of North-western America, flowering through June and July."

AUG 7 - 1923

The foregoing matter has been obligingly communicated by Mr. Douglas, by whom seeds were sent to the Horticultural Society in 1827. Our drawing was made in the Chiswick Garden, in August 1828.

This is nearly related to Lupinus leucophyllus, already figured in this work. Like that species, it is a hardy perennial, growing freely in any common soil, but perhaps preferring peat borders. It is principally distinguished by its larger and less crowded flowers, and by its long, deciduous, shaggy bracteæ, which clothe the upper unex-

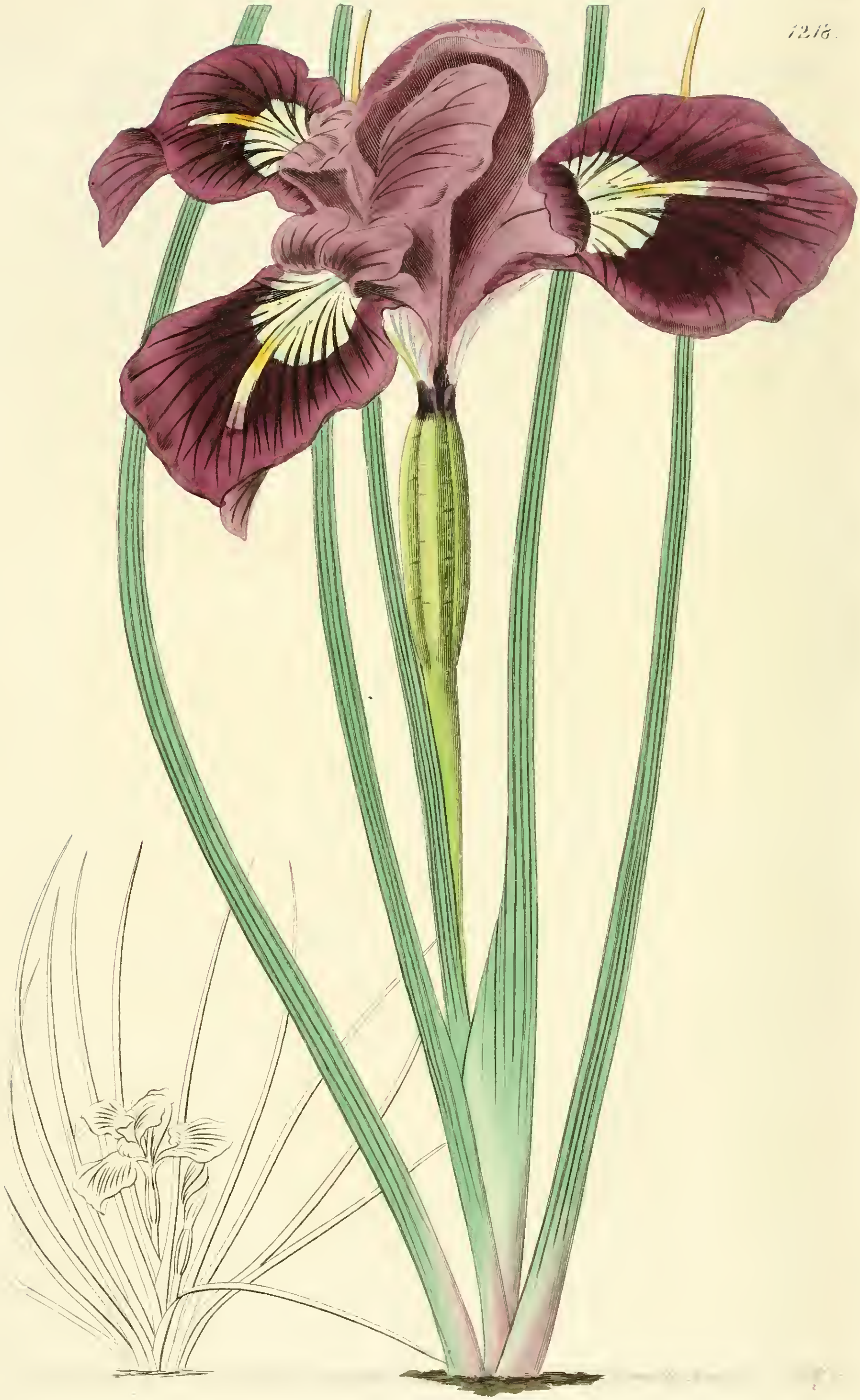
---

* See fol. 1198.

panded part of the raceme so closely as to give it a comose appearance.

" *Stems* 2 to 4 feet high, branching, very villous, of a woody texture. *Leaflets* 5-7, lanceolate, silky. *Flowers* disposed in racemes, exceeding a foot in length, alternate, on short pedicels. *Calyx* villous; upper lip bifid, under entire, with exceedingly long, villous, hair-like bracteolæ. *Bracteæ* subulate. *Vexillum* large, blue; *alæ* and *carina* pallid. *Pod* smooth, 3-5-seeded; *seeds* small, blackish brown."—*Douglas*.

J. L.



ÍRIS* ténax.

Tough-threaded Iris.

TRIANDRIA *MONOGYNIA.*

Nat. ord. IRIDEÆ.
IRIS. — *Suprà, vol.* 3. *fol.* 246.

§ Div. *Imberbes.*

I. *tenax;* imberbis, foliis lineari-ensiformibus tenacissimis cauli unifloro subæqualibus, corollæ tubo brevissimo, ovario longipedunculato nudo, petalis exterioribus obovatis acuminatis venosis, stigmatibus bilobis abbreviatis.

I. tenax. *Douglas journ. ined.*

Planta *cæspitosa, foliis rigidis, erectis, lineari-ensiformibus, sempervirentibus, tenacissimis, floribus* (*in spontaneo*) *brevioribus.* Caulis *erectus, pedalis, v. paulò major, angulatus, foliosus, basi vestigiis foliorum vestitus, ut Allium Victorialis.* Ovarium *longipedunculatum, haud foliis floralibus inclusum, subtriquetrum.* Flores *magnitudine I. virginicæ, in ovario sessiles, atro-purpurei, venosi, petalis exterioribus obovatis, acuminatis, patentibus, imberbibus, interioribus obovatis, rotundatis, erectis, brevioribus.* Stigmata *biloba, abbreviata.*

A new species discovered by Mr. Douglas, to whom we are much indebted for the following memorandum concerning it: —

" A common plant in North California, and along the coast of New Georgia, in dry soils or open parts of woods; flowering in April and May.

" The native tribes about Aguilar river, in California, find this plant very serviceable for many purposes: from the veins of the leaves fine cord is made, which is converted into fishing nets; and from its buoyancy, great strength, and durability, it suits this purpose admirably.

---

* Iris was the Greek name of the rainbow, and has been applied to this genus on account of its ever-varying colours.

It is also made into snares for deer and bears; and a good idea may be formed of its strength, when a snare, not thicker than a 16-thread line, is sufficient to strangle Cervus Alces, the Great Stag of California, one of the most powerful animals of its tribe. The cordage is also manufactured into bags and other articles."

From the foregoing account, and from what we have seen of the plant, we incline to think it might be profitably cultivated in waste land in this country for hemp. It is quite hardy, grows readily, and might soon be increased considerably; being a perennial, it would be cultivated at little expense, and there is no doubt that it would be far more advantageous to a British agriculturist than the celebrated New Zealand flax, of the success of which in this climate there is now, we presume, no probability.

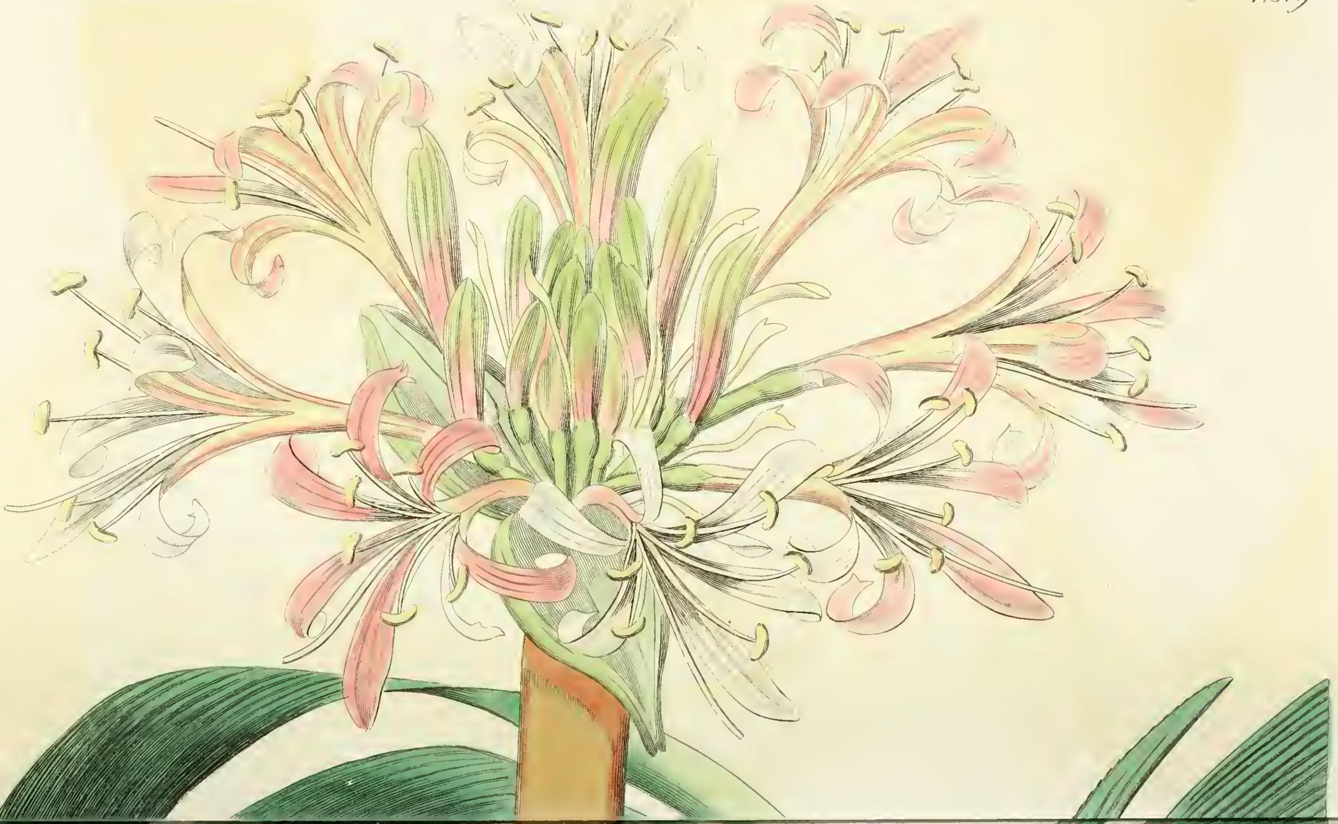
A plant forming close tufts of rigid, erect, linear-ensiform, evergreen, tough leaves, which in wild specimens are rather shorter than the flowers. *Stem* erect, a foot or rather more high, angular, leafy, clothed at the base with remains of the leaves, as in Allium Victorialis. *Ovarium* on a long stalk, not enclosed within the floral leaves, somewhat 3-cornered. *Flowers* about the size of Iris virginica, sessile on the ovarium, dark purple, veiny; the outer petals obovate, acuminate, spreading, beardless; the inner obovate, rounded, erect, shorter than the others. *Stigmas* 2-lobed, short.

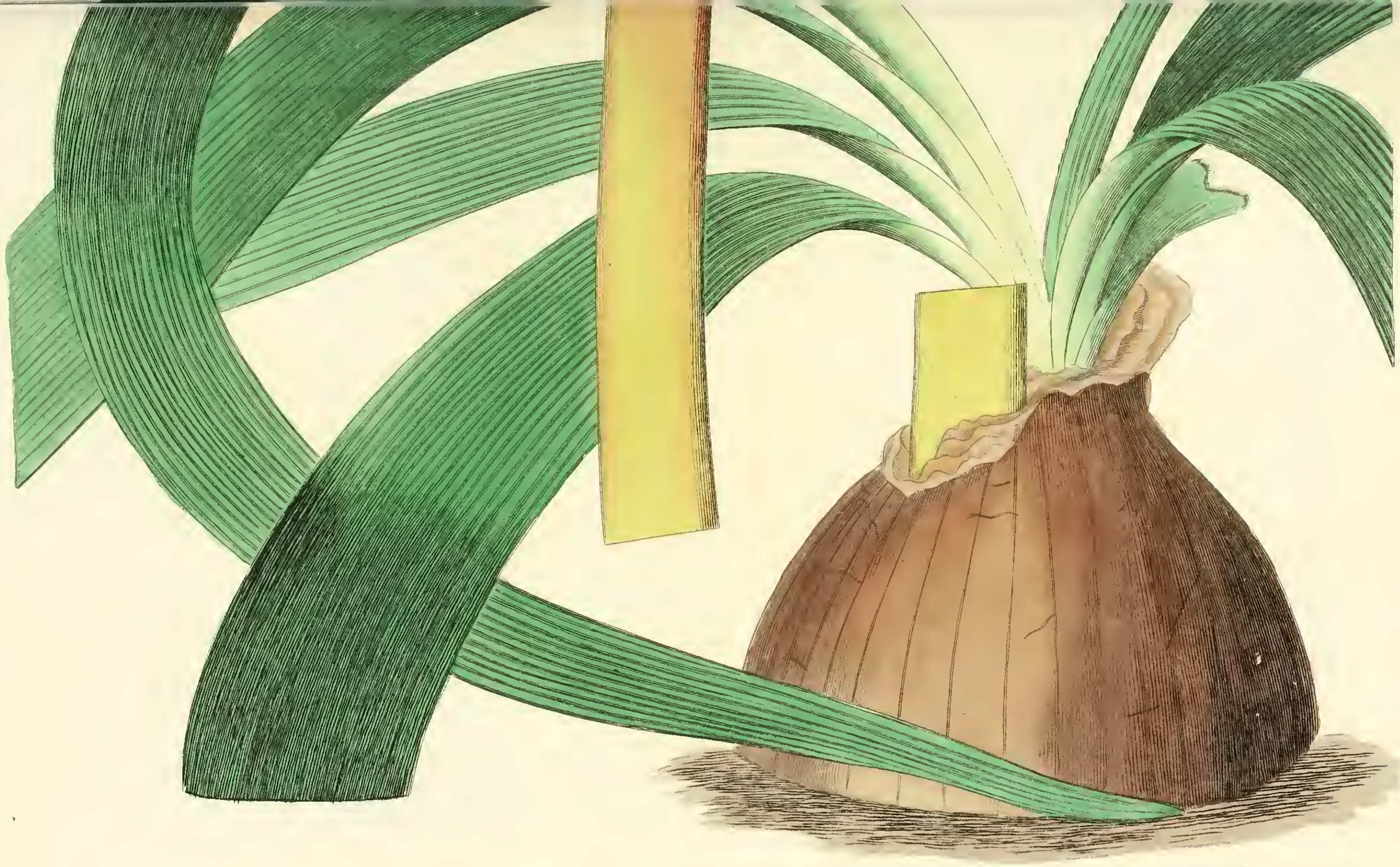
This species is most nearly related to the *Iris humilis* of Bieberstein, from which, ruthenica, biglumis, and all the neighbouring species, it is distinguished by the proportion borne to the outer petals by the stigmas, by the short tube of the corolla, and by the long stalk upon which the ovarium is elevated far above the floral leaves.

Our drawing was made in the Garden of the Horticultural Society in November last. It is not, however, to be doubted, that its true season of blossoming is the spring: the Garden specimens were in all respects like the wild ones, except that the leaves were longer than the flowering stem, — a circumstance probably caused by the unnatural period at which the plants came into flower.

J. L.

1219





Edwards del. Pub. by J. Ridgway 169 Piccadilly. March 1 1829. Watts sc.

AMARÝLLIS* coránica; *var.* pállida.

Pale Corana Amaryllis.

◆

HEXANDRIA *MONOGYNIA.*

Nat. ord. Amaryllideæ.
AMARYLLIS.—Suprà, vol. 1. *fol.* 23.

A. *coranica;* foliis bifariis alternè utròque versùs falcato-obliquatis serrulatis, scapo plano duplò altiore umbellâ numerosâ, corollis regularibus infundibuliformibus revolutis duplò longioribus pedicellis, tubo duplò breviore limbo. *Ker. suprà, vol.* 2. *t.* 139.
Ammocharis coranica. *Herbert's treatise, p.* 17.
Var. *pallida;* floribus minoribus pallidioribus unicoloribus, foliis minùs glaucis.

Our drawing of this rare bulb was made from a plant supplied by J. H. Slater, Esq. of Newick Park, to whom we have had to express our acknowledgments upon more than one previous occasion. It is a native of the Cape of Good Hope, and requires the treatment of similar plants from that country.

With regard to the genus of this species, we confess our opinion to be by no means decided. Mr. Herbert includes it in his Ammocharis; but the difference between that genus and Nerine of the same gentleman is not clear to us: in the meanwhile, the fruit of A. coranica being unknown, we judge it best to leave the species among the mass of other Amaryllideous plants called Amaryllis.

J. L.

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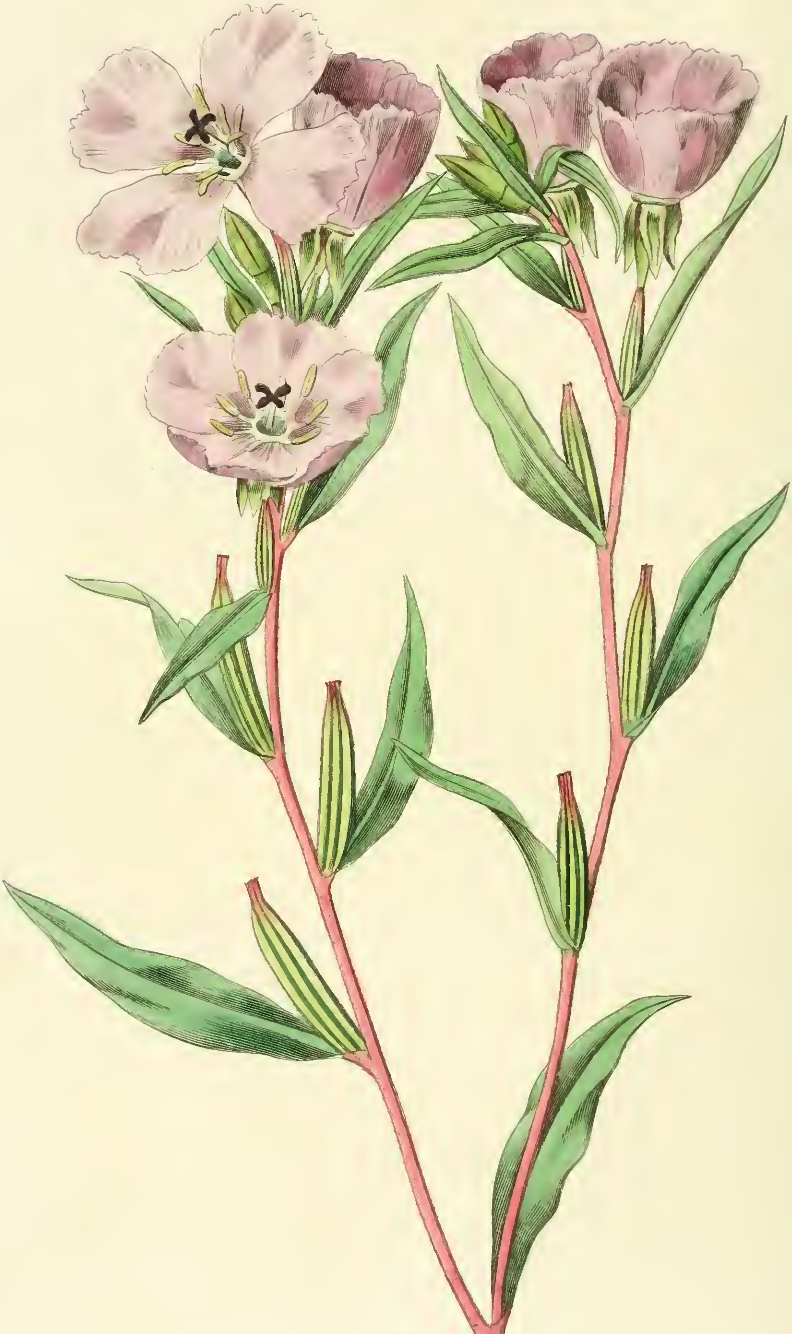
* See fol. 1188.

1220.



[illegible] J Watt

ŒNOTHÉRA* vimínea.

Long-branched Œnothera.

OCTANDRIA *MONOGYNIA.*

Nat. ord. ONAGRARIÆ.
ŒNOTHERA. — *Suprà, vol.* 2. *fol.* 147.

Œ. *viminea ;* caule suberecto virgato glabro, foliis lineari-lanceolatis glaucis, petalis calyce duplò longioribus, capsulis teretibus sulcatis pubescentibus.
Œ. viminea. *Douglas in bot. mag. fol.* 2873.

Caules *annui, suberecti, virgati, 3-pedales, basi lignescentes, purpurei, glabri, flexuosi.* Folia *glabra, lineari-lanceolata, glauca, subundulata.* Flores *magni, purpureo-carnei, diurni.* Petala *cuneata, erosa, calyce duplò ad minimum longiora.* Stigma *crassum, purpureum, 4-lobum, lobis patentibus.* Capsula *pubescens, teres, sulcata.*

Found by Mr. Douglas near the Aguilar, a river in the northern part of California, in latitude 43° north. It grows commonly in dry prairies, flowering in dry situations in April; but in low, overflowed grounds all the summer. It is a sort of woody annual, of great beauty, and perfectly hardy.

Our drawing was made in the Garden of the Horticultural Society in September 1828.

Stems annual, somewhat erect, rod-like, about 3 feet high, smooth, purple, wavy, becoming woody at the base. *Leaves* smooth, linear-lanceolate, glaucous, somewhat wavy. *Flowers* large, pinkish-purple, opening during the day. *Petals* wedge-shaped, eroded, twice, at the least, as long as the calyx. *Stigma* thick, purple, 4-lobed; lobes spreading. *Capsule* pubescent, taper, furrowed.

J. L.

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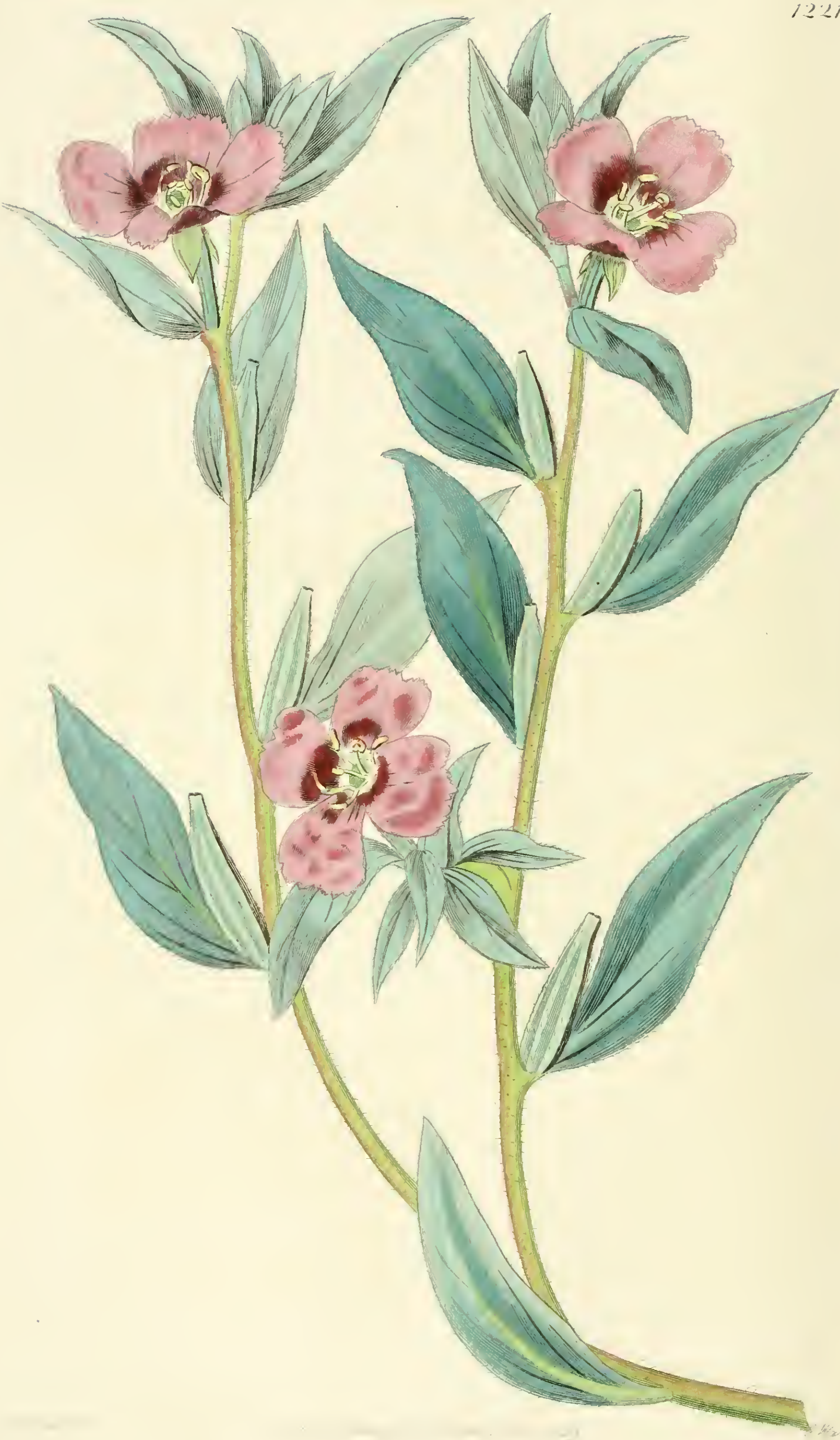
* See fol. 1142.



ŒNOTHÉRA* decúmbens.

Decumbent Purple Œnothera.

OCTANDRIA *MONOGYNIA.*

Nat. ord. Onagrariæ.
ŒNOTHERA. — *Suprà, vol.* 2. *fol.* 147.

Œ. *decumbens;* caule ascendente piloso, foliis ovato-lanceolatis glaucis pubescentibus, petalis calyce paulò longioribus, capsulis teretibus subquadratis tomentosis, stigmatis lobis crassis reflexis.

Œ. decumbens. *Douglas in bot. mag. fol.* 2889.

Caulis *annuus, ascendens, pilosus, pallidus, pedalis v. sesquipedalis, ramosus.* Folia *ovato-lanceolata, pubescentia, glauca, integerrima.* Flores *sæpiùs foliis breviores;* petala *purpurea, calyce paulò longiora;* stigma *crassum, purpureum, quasi capitatum, ob lobos reflexos.* Capsula *teres, subquadrata, non sulcata, tomentosa.*

Like the last, this pretty species has been procured for our Gardens by the exertion of Mr. Douglas, who found it in dry soils, among mountain valleys, in Northern California. It flowered for the first time in the Garden of the Horticultural Society in the autumn of 1827: our drawing was made there in September 1828.

A hardy annual, growing readily in common garden soil, and flowering during August and September. If cultivated in a patch in a large garden pot, and in poor soil, so that their over-luxuriance is checked, both this and all its purple-flowered brethren, such as *quadrivulnera, purpurea, Romanzovii, viminea, Lindleyana,* &c. produce their blossoms in much greater perfection than in the open border; but they cease flowering sooner.

Stem annual, ascending, hairy, pale, about a foot or a

---

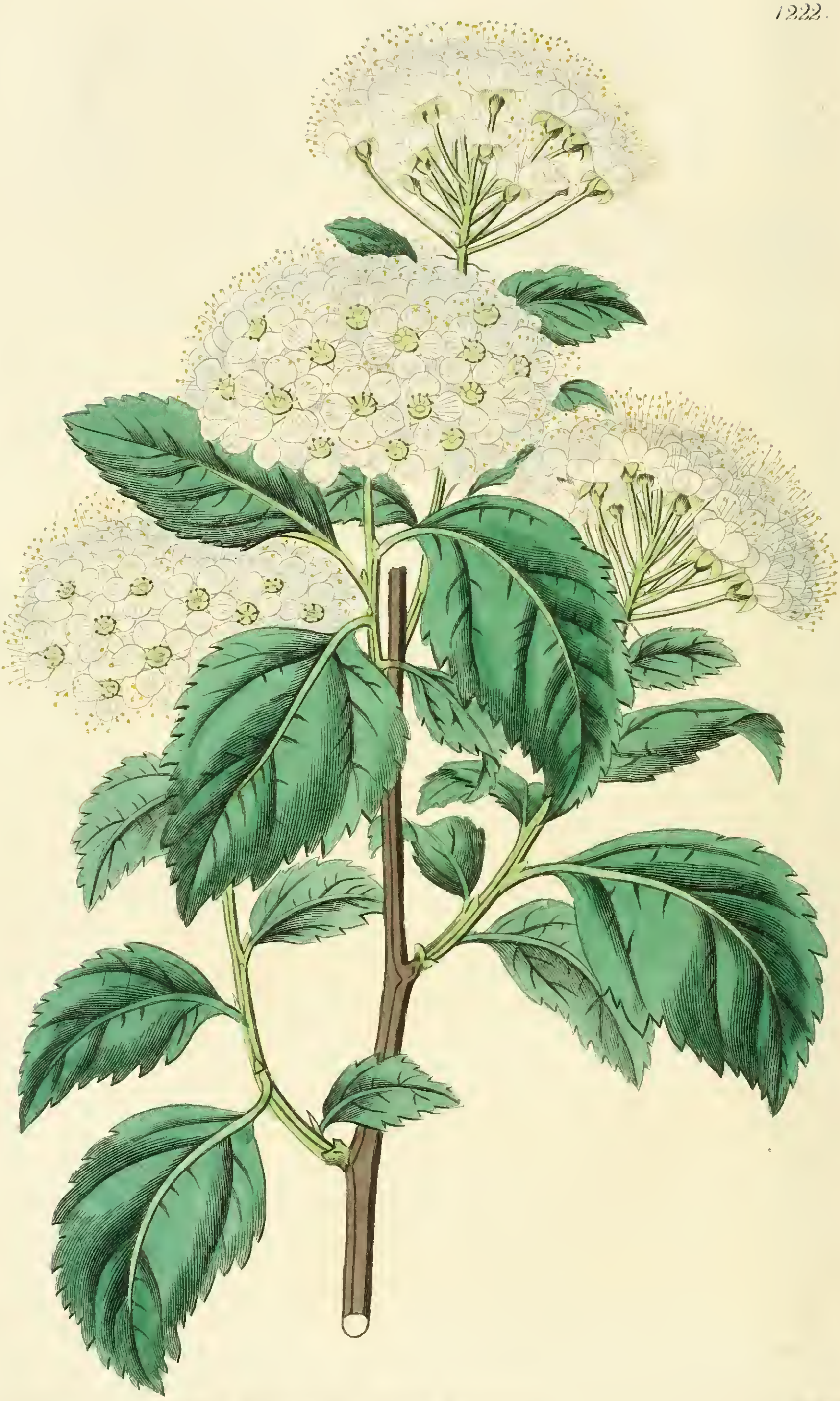
[*] See fol. 1142.

foot and half high, branching. *Leaves* ovate-lanceolate, pubescent, glaucous, entire. *Flowers* usually shorter than the leaves; *petals* purple, rather longer than the calyx; *stigma* thick, purple, having the appearance of a head, on account of the lobes being reflexed. *Capsule* taper, rather square, not furrowed, tomentose.

The stigma of this species, although having the appearance of being capitate, must not be confounded with that of the true capitate-stigma'd species, constituting M. Decandolle's first section of the genus.

J. L.

1222.



SPIRǼA* chamǽdrifólia.

Germander-leaved Spiræa.

ICOSANDRIA *PENTAGYNIA.*

Nat. ord. Rosaceæ.

SPIRÆA L. — *Calyx* 5-fidus, persistens. *Stamina* 10-50, cum petalis toro calyce adhærente inserta. *Carpella* 1-00 distincta, raró basi coalita, brevè apiculata, sessilia, raró stipitata. *Semina* 2-6, suturæ internæ affixa, exalbuminosa. *Embryo* inversus, cotyledonibus crassiusculis. —— Frutices *inermes, v.* herbæ *perennantes.* Rami *alterni.* Folia *alterna, simplicia, raró decomposito-pinnatisecta, nervis pinnatis v. ternato-palmatis.* Flores *albi v. rubicundi, nunquam flavi.* Decand. prodr. 2. 541.

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§ *Chamædryon.* Ovaria libera. Torus apice liberus, basi tubo calycino concretus. Carpella non inflata. Frutices. Flores hermaphroditi umbellati v. subcorymbosi, pedicellis indivisis unifloris. Folia integra v. dentata exstipulata. *Dec. l. c.*

S. *chamædrifolia ;* foliis ovatis acuminatis inciso-serratis glabris, ramis angulatis flexuosis, corymbis terminalibus hemisphæricis.
Spiræa chamædryos foliis. *Ammann stirp. rar.* 190.
S. chamædrifolia. *Linn. sp. pl.* 1. 701. *n.* 9. *Pall. ross. t.* 15. *fol. ad basin sinistr.*
? S. chamædrifolia *α. Cambessedes mon. p.* 362.
S. ulmifolia. *Scopoli carniol.* 1. *p.* 349. *t.* 22. *Willd. sp. v.* 2. *p.* 1154. *Dec. prodr.* 2. 542.

Frutex *humanæ altitudinis, erectus, ramosus, ramis cinereis, junioribus flexuosis angulatis.* Folia *ovata, acuminata, inciso-serrata, glabra, Ulmi campestris magnitudine, petiolis pilosis.* Corymbi *terminales, pedunculati, hemisphærici, subracemosi.* Flores *albi, majusculi.*

The genus Spiræa has been excellently remodelled by M. Cambessedes, in a valuable paper published in the *Annales des Sciences Naturelles:* but a great deal of con-

---

[*] According to Sprengel, the σπειραία of Theophrastus was the modern Spiræa salicifolia. It seems to have derived its name from σπειράω, to become spiral, in allusion to the fitness of the plant for twisting into garlands, &c.

fusion still exists among the species; confusion which can only be removed by a critical examination of the synonymy of each, and by good figures of all the species and their principal varieties.

We suspect that this observation is particularly applicable to the subject of the accompanying plate, of which, according to Russian and other Botanists, the varieties are very numerous; but under which we are rather disposed to believe two at least, if not more, distinct species are confounded.

S. chamædrifolia originated with Ammann, from whom Linnæus adopted it. The description of the former of these two writers is so good, that it leaves no doubt upon our minds that he intended the species now represented; indeed his account will not apply to any other plant: he confines its range to Davuria; and he does not advert to any supposed tendency in it to vary.

Gmelin, however, in his *Flora Sibirica,* declares it to be extremely variable; but the account he gives of the varieties makes it more than probable that he is talking of different species. This may possibly have predisposed Pallas to adopt the same opinion in his *Flora Rossica,* in which, of all the forms he has figured, the single leaf alone, at the bottom of the left side of the plate, seems to us to represent exactly the species intended by Ammann. According to Pallas, it first appears on the east of the Ural Mountains, skirting the banks of the Tura, the Ljala, the Cocva, the Sosva, and other Alpine streams; becomes abundant about the Jenisei, and fills all the woods and thickets of the Transbaicaline districts, and especially of Davuria. But we believe this, the Davurian plant, is different from the others of which Pallas speaks.

This confusion having been once introduced, a new name was given to the true S. chamædrifolia by Scopoli, who, not perceiving its identity with the plant of Ammann, published it under the name of S. ulmifolia, — an error which has been adopted by all succeeding Botanists. We now correct this mistake, cancelling the species called ulmifolia, as a mere repetition of S. chamædrifolia.

The Spiræa flexuosa of Dr. Fischer is in all probability the same species as *S. chamædrifolia;* at least, when that

Botanist was last in England he saw this species growing, and called it his *S. flexuosa davurica;* while the plant called *S. flexuosa* in Cambessedes's paper appears from the figure to be intended for another, named by Dr. Fischer *S. flexuosa latifolia,* which approaches nearer to the " Spiræa præcox montana folio parvo in summitate bifido v. trifido" of Gmelin, which is also in our Gardens, under the false name of *Spiræa crenata,* and which is the *S. chamædrifolia* of Willdenow.

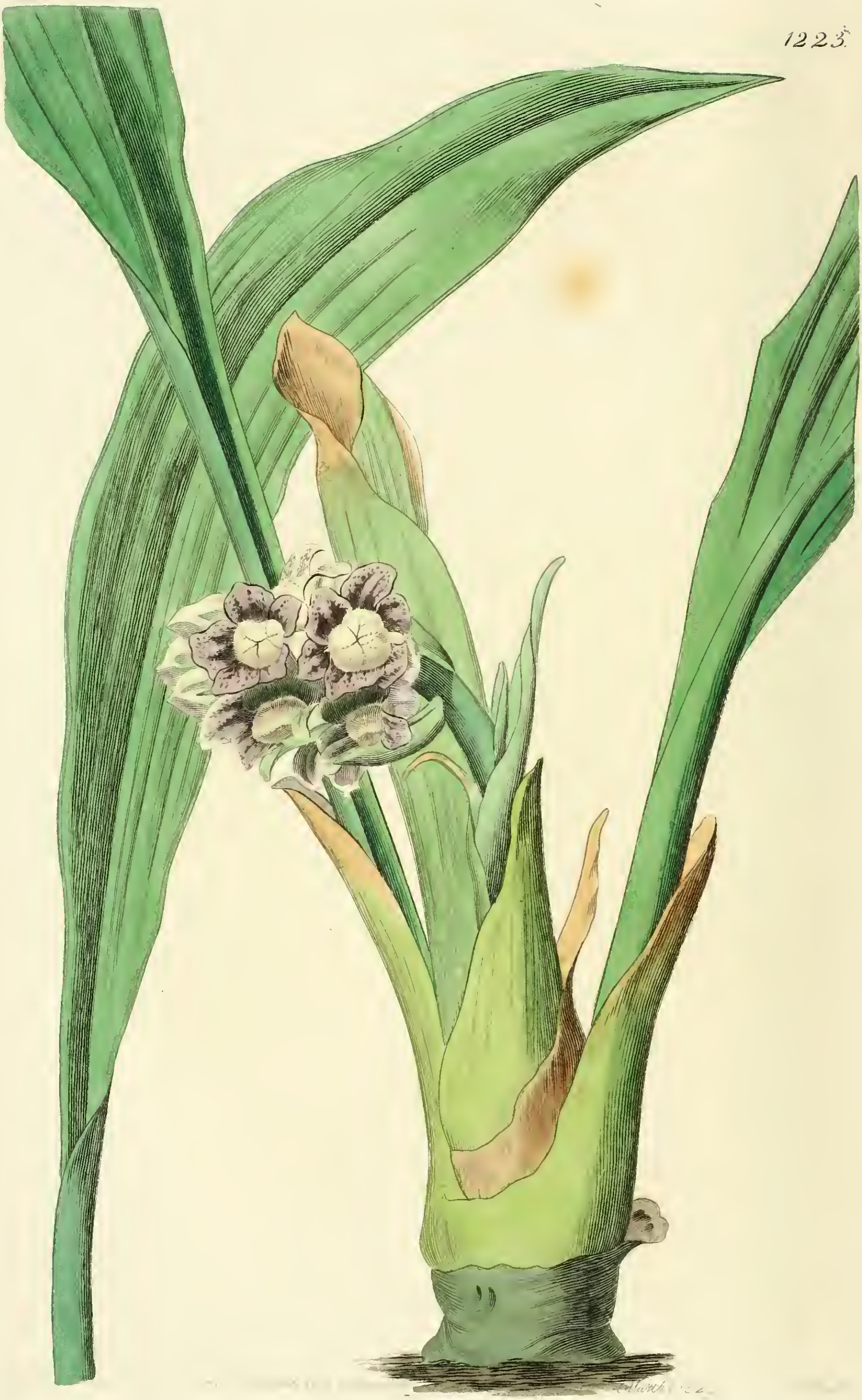
According to Pallas, S. chamædrifolia, or some of its supposed varieties, is found in Kamtchatka, where the inhabitants use the leaves for tea: the strong shoots are manufactured into smoking tubes for tobacco-pipes, and the plant itself makes excellent clipped hedges. For the latter purpose it is worth a trial in this country.

Our drawing was made in June 1824, in Messrs. Whitley's Nursery. The shrub is quite hardy, and very ornamental.

Stem about as high as a man, erect, branched; the *branches* ash-coloured, when young flexuose and angular. *Leaves* ovate, acuminate, inciso-serrate, smooth, about the size of those of Ulmus campestris, with pilose petioles. *Corymbs* terminal, stalked, hemispherical, somewhat racemose. *Flowers* white, rather large.

J. L.

1223.



1223

TUPĪ́STRA* nútans.

Nodding Tupistra.

HEXANDRIA *MONOGYNIA.*

Nat. ord. AROIDEÆ. § ? ? *Tacceæ.*
TUPISTRA.— Suprà, vol. 9. *fol.* 704.

T. *nutans ;* spicâ petiolis breviore obtusissimâ nutante, floribus densissimè approximatis campanulato-pateriformibus unibracteatis.—*Wallich MSS.*

Planta *acaulis, foliosa, solitaria, omnibus partibus lævissima.* Rhizoma *carnosum, pallidum, crassum, propter cicatrices insertionum foliorum annorum præteritorum transversim et subparallelè annulatum, indivisum, perpendiculare, rectum, deorsùm attenuatum, et fibras radicales exserens crassiusculas, teretes, albicantes, leviter ramosas.* Folia *circiter sex, omnia radicalia, erecto-patula, obscurè bifaria, apice nutantia, oblongo-lanceolata, extrorsùm attenuato-subacuminata, basi acuta, vix undulata, subplicata, coriacea, secus nervorum tractus obliquè lineolata, suprà atro-viridia, lucida, subtùs pallida, tamen nitidula, costâque elevatâ crassâ, pedalia, sesquipedalia, quin bipedalia, evolutione convoluto-infundibuliformia.* Petioli *bifariè suberecti, foliis pluries breviores, tri-quadripollicares, cylindrici, profundo sulco suprà exsculpti, deorsùm valdè ampliati, basi latissimâ bifariè imbricantes rhizomatisque superiorem partem arctè amplectentes.* Scapus *centralis, è vertice rhizomatis, erectus, teres, petiolis sæpiùs brevior, tripollicaris, pallidus, pennam anserinam crassus, apice incurvâ subincrassatâ spicigerus, nudus salvâ basi involutâ, bracteis duabus membranaceis ipsum longitudine æquantibus, sursùm omninò liberis strictis subconvolutis, oblongolanceolatis, aliquot interpetiolaribus emarcidis latioribus plerumque interjectis.* Spica *terminalis, cylindrico-oblonga, obtusissima, bi-tripollicaris, pollicem et ultrà lata, nutans, demùm omninò decurva scapoque parallela, floribus tecta densis, inodoris, ex viridi fuscescentibus, minutim purpureo-punctulatis, sessilibus è rachi angulo recto divergentibus, suffultis bracteâ solitariâ, membranaceâ, ovatâ, acutâ, lineas tres longâ, basi latâ, fundo floris adpressâ extrorsùm patente, demùm reflexâ, infimis paucis nunc vacuis per apicem scapi vagis.* Perianthium *campanulato-pateriforme, carnosum, semipollicem longum, fundo conico acuto albicante subanguloso, limbo patentissimo sex-fido : laciniæ ovatæ, obtusæ, basi leviter imbricantes, subtùs virides, suprà purpureo-punctulatis lineis duabus marginalibus, tertiâque*

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* The meaning of this word is not explained by its author, and we are unable to discover it.

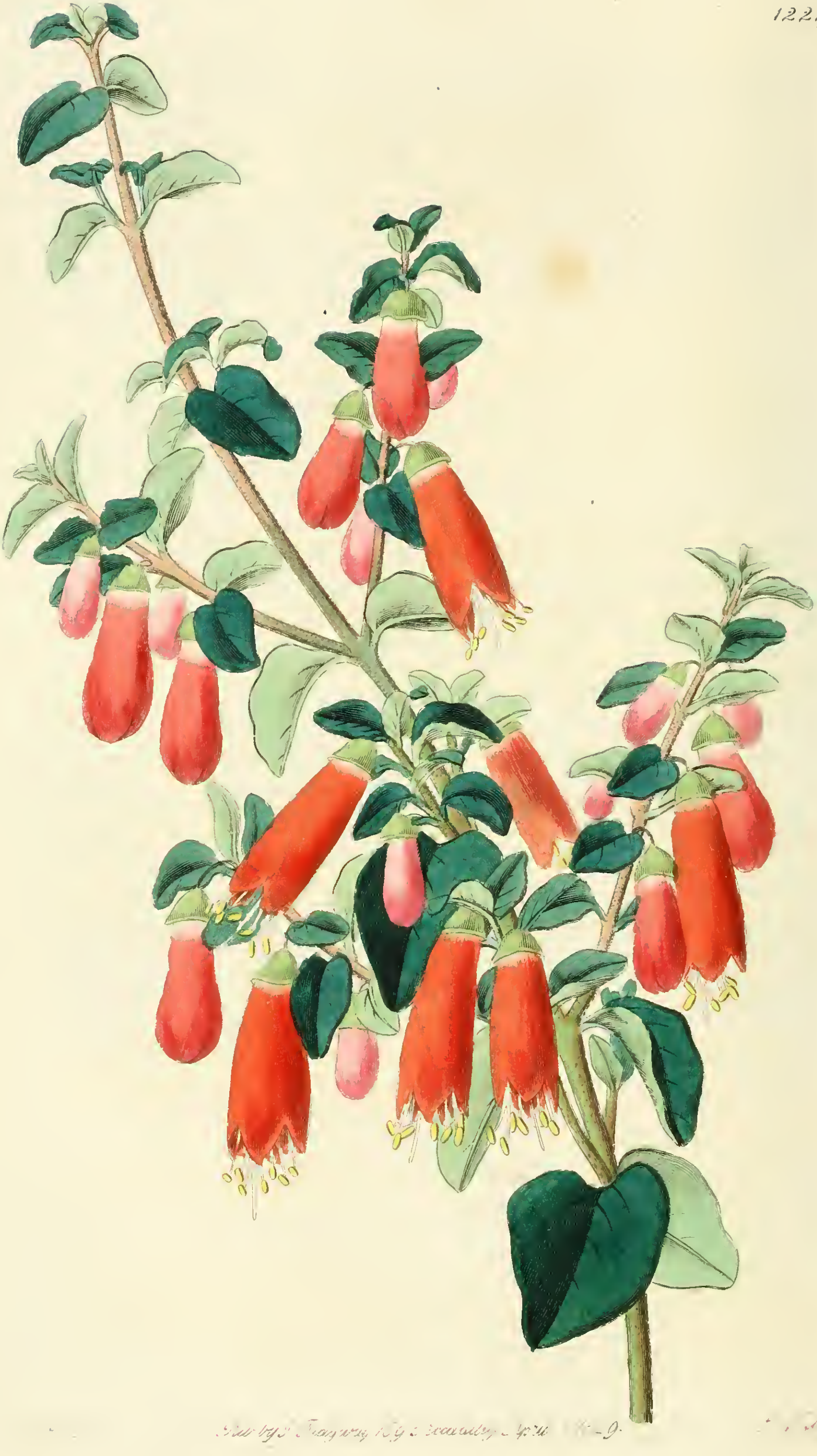
intermediâ viridescentibus. Stamina *sex, erecto-conniventia, perianthio dimidiò breviora, laciniis ejusdem opposita, fauce inclusa, stigmateque ferè omninò occultata.* Filamenta *valdè crassa, carnosa, conica, alba, ad basin perianthii inserta.* Antheræ *obliquè apici filamentorum adnatæ, breves, oblongæ, biloculares.* Ovarium *brevissimum, oblongum, vix à basi styli extùs discernendum, triloculare: ovula oblonga, in singulo loculo gemina, appensa.* Stylus *cylindricus, longiusculus, apice dilatatus trilobatusque.* Stigma *maximum, carnosum, album, faucem perianthii totam ferè operiens, placentiforme, ruguloso-scabridum, suprà planum, trisulcum, centro depresso, margine crassissimum, undulatum, trilobum, subtùs concaviusculum.*—Wallich MSS.

"This indubitable Tupistra, which has little to recommend it except its singularity, comes very near to the other, and hitherto only known, species, T. squalida of Mr. Ker. It may be easily recognised, however, by its much shorter, exceedingly dense, blunt spike, of cup-formed, brownish-green flowers, having their throats completely shut up by the large, white, fleshy, and subpeltate stigma. It was introduced into the Botanic Garden of Calcutta in 1822, where it blossoms in the cold weather."

For the foregoing memorandum and very elaborate description, we have again to express our acknowledgments to our excellent friend Dr. Wallich, to whom the world is entirely indebted for this highly interesting addition to a curious and little-known genus. It is a native of hills near the frontiers of Sylhet, where it is called *Kala-Tatee.*

Our drawing was made in a stove, in the Garden of the Horticultural Society, in November last. The plant had been brought home for the Honourable Court of Directors of the East India Company by Dr. Wallich, and was subsequently presented by them to the Horticultural Society.

J. L.



Pub. by T. Curtis, St Geo: Crescent Apr. 1. 1809. [illegible]

1224

CORRÉA* pulchḗlla.

Pretty Correa.

OCTANDRIA *MONOGYNIA.*

Nat. ord. RUTACEÆ. § *Diosmeæ Australasicæ* Ad. Juss.
CORREA.—*Suprà, vol.* 1. *fol.* 3.

C. *pulchella;* foliis ovatis obtusis undulatis utrinque pubescentibus, corollis cylindricis ventricosis, calycibus abbreviatis truncatis.

C. pulchella. *Hort.*

Suffrutex, *ramis teretibus, ferrugineis.* Folia *ovata, obtusa, coriacea, undulata, utrinque pubescentia, mox denudata.* Flores *solitarii, rosei, penduli.* Calyx *abbreviatus, truncatus.* Corolla *ventricosa,* 4-*dentata, tomentosa, calyce multoties longior.* Stamina *alterna, paulò longiora.* Ovarium *glabrum.*

A handsome shrub; our drawing of which was made in the Greenhouse of the Comte de Vandes in October last. It is said to have been introduced by Mr. Mackay, of the Clapton Nursery, about the year 1824; is a healthy-looking, hardy, greenhouse shrub; and strikes from cuttings without much difficulty.

A native of the southern coast of New Holland.

Correa alba is not so different from this as it appears to be at first sight; the principal distinction consisting in the colour of the flower, and the smallness and undulation of the leaves.

An *undershrub,* with taper, ferruginous branches.

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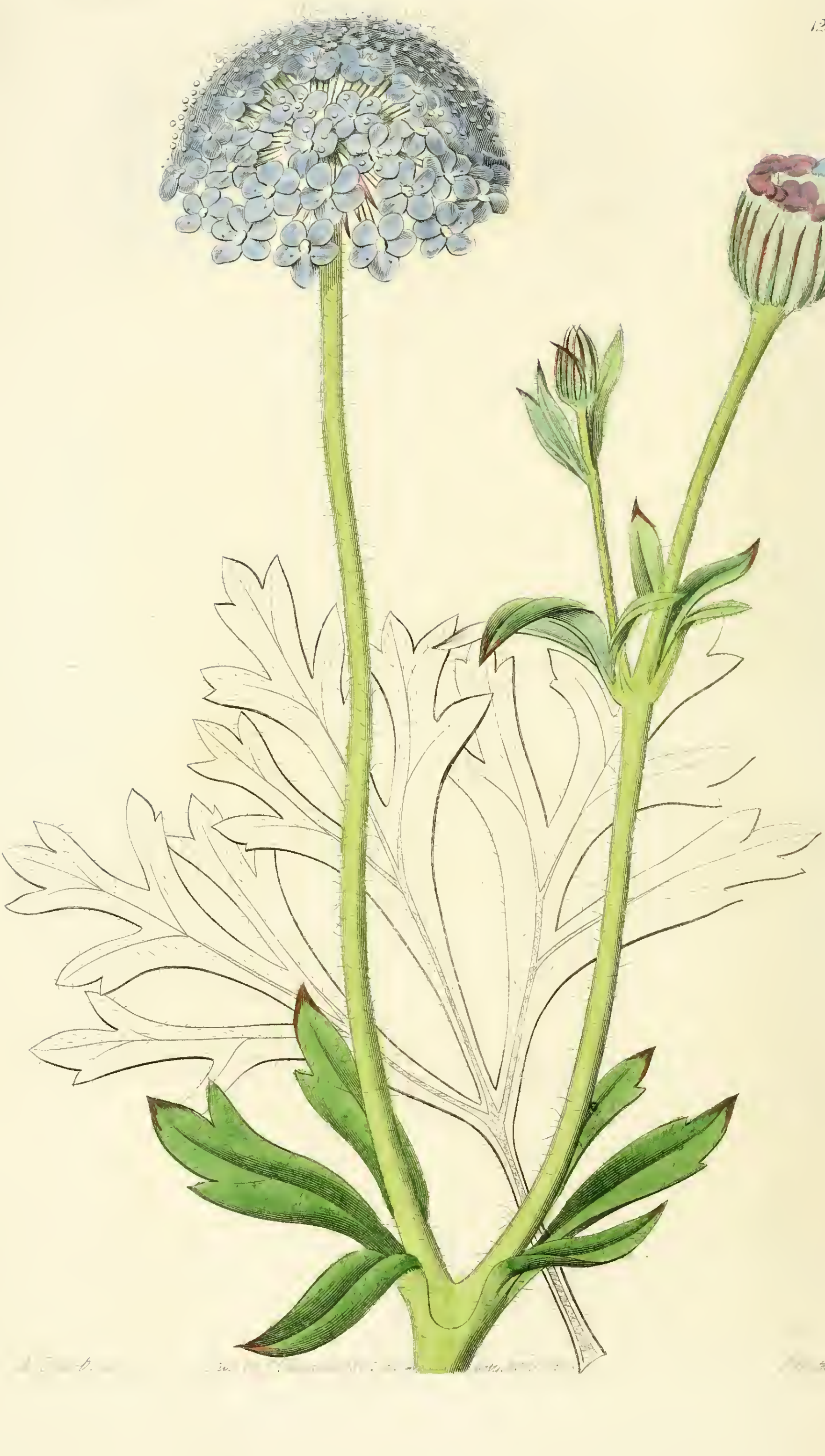
* M. Correa de Serra, after whom this was named, was a distinguished Portuguese Botanist, whose merits are better known to his surviving friends than to the public. His chief works were an excellent paper on Aurantiaceæ, and some Carpological dissertations in the *Annales du Muséum.*

Leaves ovate, obtuse, coriaceous, wavy, downy on each side, when old becoming nearly smooth. *Flowers* solitary, light red, pendulous. *Calyx* short, truncate. *Corolla* inflated, 4-toothed, downy, very much longer than the calyx. Alternate *stamens* rather the longest. *Ovarium* smooth.

J. L.

1225



TRACHYMÉNE* cærúlea.

Blue-flowered Trachymene.

PENTANDRIA *DIGYNIA.*

Nat. ord. UMBELLIFERÆ. § *Hydrocotylineæ.*

TRACHYMENE Rudge. — *Polachenium* opposite valdè compressum, utrinque sed basi præcipuè emarginatum, didymum, calyculo stylisque coronatum. *Achenia* subrotunda, compressissima, quinquecostata, costis capillaribus curvilineis ; marginalibus brevioribus rectilineis. *Commissura* clausa, angustissima. *Corolla* subæqualis. *Petala* integra, absque acumine, extrorsùm latiora, sessilia (æstivatione valdè imbricata).—— Umbellæ *pedunculatæ, axillares, terminalesve, simplices, multifloræ, pedicellis interioribus sensim brevioribus, involucratæ.* Involucra *polyphylla, foliola basi in urceolum connata, et pedicellis adpressa.* Stamina *corollâ longiora.* Styli *subulati, divergentes, longi.* Stigmata *simplicia, obtusiuscula.* Discus *bilobus, membranaceus, concavus, subcrenatus.* Achenia *tuberculis minutis ad lentem muriculata, alterum sæpè abortivum.* Folia *petiolata, alterna, tripartito-multifida.* — La Gasca MS. ad *Tr. incisam.*

T. *cærulea ;* pilosa, foliis radicalibus tripartitis, laciniis trilobis incisis : superioribus sessilibus tripartitis, petalis obtusis, fructibus glabris.
T. cærulea. *Graham in Edinb. new phil. journ.* 1828, *p.* 380.
Didiscus cæruleus. *Dec. MS. Hooker in bot. mag. fol.* 2875.

Obs. *Fructus certè evittatus.* Ovarium *loculo altero sæpiùs abortiente. Pericarpium chartaceum v. potiùs submembranaceum. Staminum supremum ascendens, inferiora declinata, omnia citò caduca.*

This beautiful New Holland annual has only been seen in our Gardens during one season. It first presented itself to our notice in the Garden of the Horticultural Society in August last, having been raised in that Collection from seeds received the previous spring from Mr. Charles Frazer, of Sydney in New South Wales. We have subsequently heard of it in other Collections in this country; and M. Decandolle informs us, that it is also growing in the Geneva Garden. It is a half-hardy annual, flowering in great beauty in the open border in October and November; but in such situations it does not ripen seed: for that purpose, the plants must be kept in the greenhouse, and treated as Balsams and similar annuals: so managed, they will flower from July to November.

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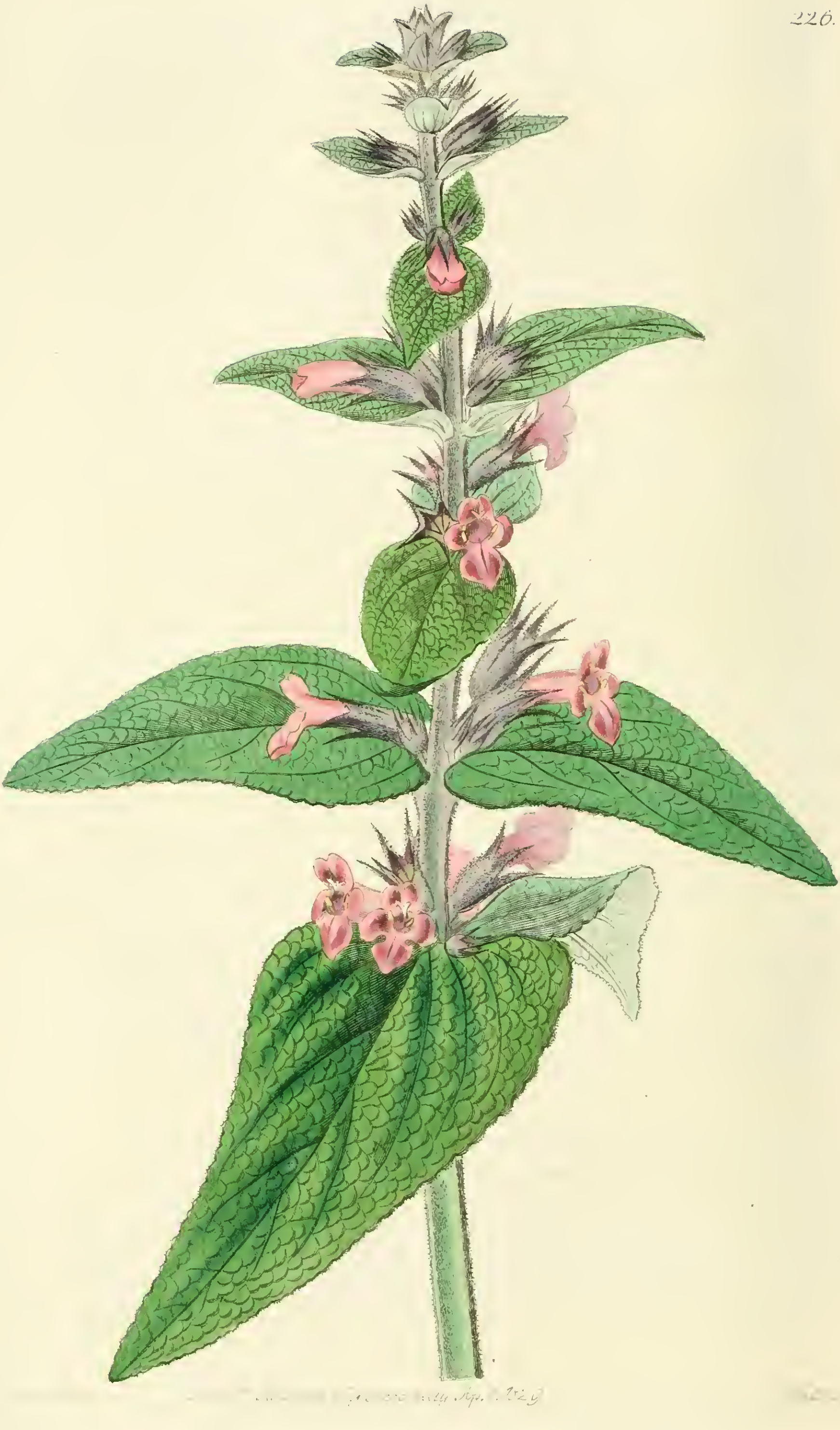
* So called from τϱαχὺς, rough, and μήνη, a membrane; in allusion to the coat of the fruit.

Is this distinct from Trachymene? Here is a question by no means easy to answer. If we were to judge only from the figure and description of Trachymene in the *Transactions of the Linnean Society*, we should reply in the affirmative; for it is to be understood from what we find in that work, that the petals are acuminate, the æstivation not imbricated, or but slightly so, and the fruit a double, tumid, muricated body, without ridges; besides which, the description does not advert to any one of the most singular characteristics of the present plant. But upon examining a wild specimen of Trachymene incisa, and consulting M. La Gasca, by whom the original specimen in Mr. Rudge's Herbarium has been analysed, we have come to the conclusion that the apparent distinctions between Trachymene and the present plant are either unimportant or non-existent; in fact, upon comparing this species with M. La Gasca's manuscript character of Trachymene, we do not find a single material point of difference. We are, therefore, reluctantly compelled to abandon an opinion we at first, from want of sufficient materials for examination, were led to entertain, that this and Trachymene were distinct; an opinion which we the more regret that we formed, because we fear that the knowledge of it has tended to induce our learned friend M. Decandolle to come to a similar conclusion in the unpublished 4th volume of his *Prodromus*.

M. La Gasca allows us to take this opportunity of stating, that the Azorella ovata, lanceolata, and compressa of La Billardière, and A. linearis of Cavanilles, which are referred to Trachymene by Sprengel, do not properly form a part of that, but belong to his Fischeria, — a very distinct genus.

We suspect that the fruit of this plant examined and described by Dr. Hooker in the *Botanical Magazine*, was in a very imperfect state, as we can find no trace of the vittæ mentioned by our much-valued and very accurate friend: we are confirmed in this opinion, because we also find the seed represented as loose in the pericarpium, — a character which is certainly not to be seen in perfect fruit. J. L.

226.



[illegible] Ap. 1. 1829

1226

STÁCHYS* Sálviæ.

Sage-leaved Stachys.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. LABIATÆ.
STACHYS. — *Suprà, vol.* 13. *fol.* 1080.

S. *salviæ;* foliis cordato-sagittatis obtusis crenatis rugosis tomentosis, verticillastris 3-floris subspicatis, corollæ labio inferiore ovato, caule fruticoso. Caulis *fruticosus, tetragonus, tomentosus.* Folia *oblonga, obtusa, crenata, rugosa, tomentosa, inferiora sagittata, petiolata, superiora cordata, sessilia.* Verticillastra *triflora.* Calyx *tomentosus, pungens, 5-dentatus.* Corolla *pubescens, purpurea, tubo incurvo, limbi labio superiore emarginato, inferioris laciniis ovatis, subæqualibus.*

This plant, which, like many others from the same country, has never before found its station in the records of science, is a native of the neighbourhood of Valparaiso, where it was gathered in flower by Mr. James M'Rae, in February 1825. Seeds were brought by him to the Horticultural Society, in whose Garden our drawing was made in August 1828.

It forms a handsome half-shrubby plant, about 3 feet high; but is more remarkable as a Botanical curiosity than as an object of Horticultural interest.

Stem shrubby, 4-cornered, downy. *Leaves* oblong, obtuse, crenated, rugose, downy, the lower sagittate, stalked, the upper cordate, sessile. *Whorls* 3-flowered. *Calyx* downy, pungent, 5-toothed. *Corolla* pubescent, purple, with a curved tube, with the upper lip of the limb emarginate, and the segments of the lower lip ovate, nearly equal. J. L.

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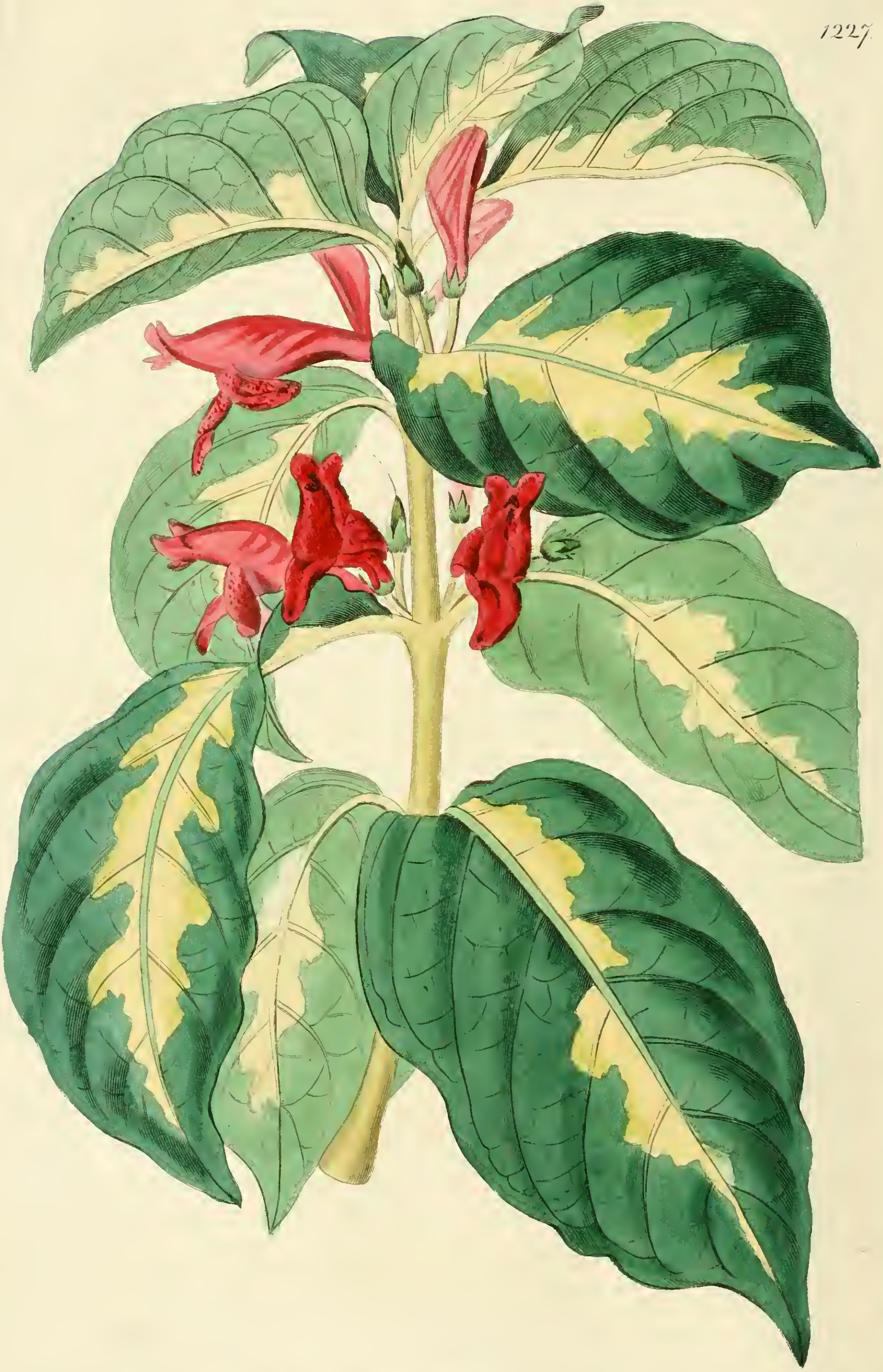
* The Greeks had a plant they called στάχυς, which was probably our Stachys germanica: the meaning of the word is literally *spike*, and has reference to the mode of inflorescence of some species.



[illegible] Ridgway [illegible] April 1.1829. [illegible] atts.

JUSTÍCIA* pícta.

East Indian Caricature Plant.

◆

DIANDRIA *MONOGYNIA.*

Nat. ord. ACANTHACEÆ.
JUSTICIA. — *Suprà, vol.* 4. *fol.* 309.

J. *picta;* frutescens, erecta, foliis elliptico-lanceolatis acuminatis variegatis, floribus axillaribus subternatis nudis, corollæ pubescentis limbo reflexo contorto, labio ovato.
J. picta. *Vahl. symbolæ,* 2. 14. *Willd. sp. pl.* 1. 88. *Ait. Kew. ed.* 2. 1. 37. *Römer et Schultes,* 1. 149. *Roxb. fl. Ind.* 1. 118. *Hort. Bengal. p.* 3.
Tsjude-Maram. *Rheede hort. malab.* 6. 111. *t.* 60.
Folium bracteatum. *Rumph. amboin.* 4. 73. *t.* 30.

This elegant shrub is not very frequent in English Collections, but is one of the commonest of those cultivated in India, in which country it is universally found in Gardens, from the Islands of the Archipelago to the capitals of the kingdoms of the continent. Its vernacular name is not mentioned by Dr. Roxburgh; and its native country is unknown. Dr. Wallich informs us, that during his very extensive journeys in India he has never seen it except in Gardens; and that the natives call it Chinabacca and Chirhirri.

The variegation of the leaves may, like the red coals of a glowing fire, be easily fancied, by an ingenious observer, to resemble the features of a distorted human countenance, on which account the Caricature plant has become its name.

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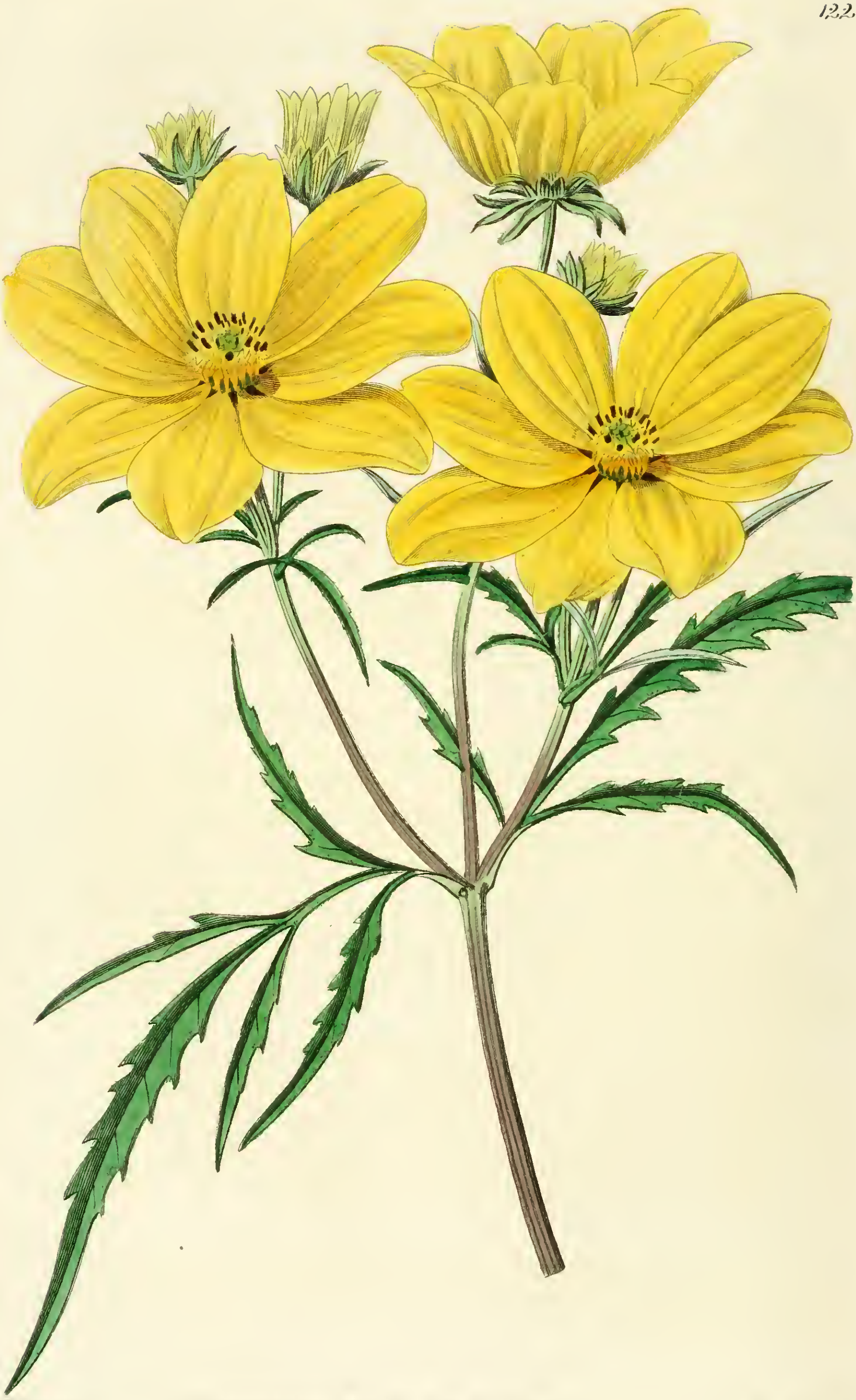
* Named in honour of Mr. James Justice, a meritorious Scotch Gardener, who lived in the middle of the last century.

A robust stove-plant, easily propagated by cuttings: it flowers in December and January.

Our drawing was made in the Garden of the Horticultural Society, from a plant that had been presented by the Honourable Court of Directors of the East India Company.

J. L.

1228.



[illegible] Ridgway [illegible] 1829.

Watts [illegible]

1228

COREÓPSIS* áurea.

Golden Coreopsis.

SYNGENESIA *FRUSTRANEA.*

Nat. ord. COMPOSITÆ.
COREOPSIS. — *Suprà, vol.* 1. *fol.* 7.

C. *aurea ;* foliis serratis : radicalibus tripartitis ; caulinis trifidis integrisve lanceolato-linearibus. *Ait. Kew. ed.* 1. 3. 252. *Willd. sp. pl.* 3. 2252. *Pursh. Am. sept.* 2. 568.
C. trichosperma β aurea. *Nutt. gen.* 2. 180.
Biennis, tripedalis, stricta, parùm ramosa, capitulis paucis conspicuis versùs fastigium coronata. Folia *linearia, pubescentia,* 3-5-*partita, serrata, opposita.* Radii 8, *oblongi, subintegri, aurei, involucro* 3-*plò longiores.* Fructus *cuneatus, ferè glaber, apice bicornis.*

This has long disappeared from our Gardens, after having been introduced in 1785, according to the *Hortus Kewensis*, by the late Lord Tankerville. Recently it has been again recovered by the Horticultural Society, to whom it was sent by Mr. Thomas, of New York, at the special request of Mr. Sabine. We trust it will now be preserved.

It is a hardy biennial, remarkable for the beauty of its heads of flowers, which are large, bright yellow, and supported by long slender stalks.

The species was originally described in the first volume of the *Hortus Kewensis ;* it has been subsequently adopted by Willdenow and other Botanists as a doubtful plant ; Pursh does not appear conscious of having seen it ; but Mr. Nuttall has rightly judged its affinity to be with

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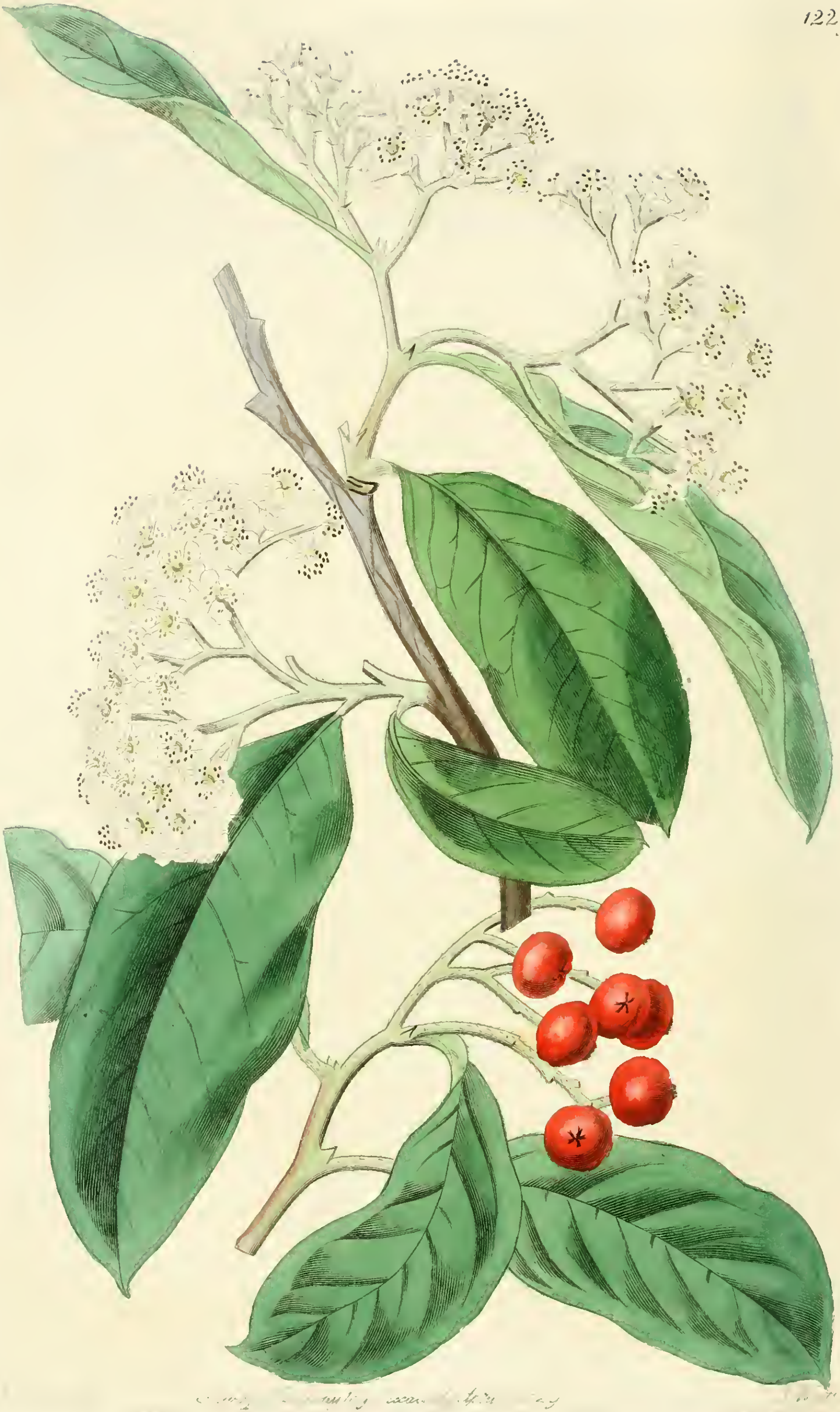
[*] From κόρις, a tick, and ὄψις, resemblance ; on account of the resemblance of the fruit, which, when sticking to the coats of animals, is very like the insects that infest them.

C. *trichosperma,* although he is, we think, wrong in making it a variety of that species.

About 3 feet high, erect, branching but little, bearing towards its summit a few showy heads of flowers. *Leaves* linear, pubescent, 3-5-parted, serrated, opposite. *Rays* 8, oblong, nearly entire, bright yellow, three times as long as the involucrum. *Fruit* wedge-shaped, nearly smooth, 2-horned at the end.

J. L.

1229



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COTONEÁSTER* frígida.

Mountain Cotoneaster.

◆

ICOSANDRIA *DI-PENTAGYNIA.*

Nat. ord. POMACEÆ. *Lindley Synops. p.* 103. Rosacearum. Sectio *Juss. Decand.*

COTONEASTER Medicus. *Lindl. in Linn. trans.* 13. *p.* 101.— *Flores* sæpiùs polygami. *Calyx* turbinatus, obtusè 5-dentatus. *Petala* brevia, erecta v. patentia. *Stamina* dentium longitudine. *Styli* glabri, staminibus breviores. *Nuces* parietales, calyce inclusæ.—— Arbusculæ (*Europæ et Indiæ*). Folia *simplicia,* integerrima, infrà pilis obsita. Cymæ *laterales, patentes.* Bracteæ *subulatæ, deciduæ.* Petala *parva, diu persistentia.*

C. *frigida;* cymis multifloris lanuginosis, foliis ovali-lanceolatis subtùs tomentosis deciduis, caule arboreo.

C. frigida. *Wallich MSS.*

Arbor *mediocris, ramis patentibus, subsimplicibus, cinereo-purpureis, cortice trunci fisso.* Folia *ovali-lanceolata, mucronulata, decidua, suprà glabra, subtùs, ramulisque novellis, tomentosa.* Cymi *terminales, multiflori, lanuginosi.* Calyces *lanuginosi, 5-dentati;* petala *alba, subrotunda, patentia.* Styli *et ovaria* 2. Poma *pisiformia, rubra;* nuces 2, *monospermæ.*

For the discovery of this very fine new species of Cotoneaster the world is indebted to Dr. Wallich, by whose plant-collectors it was brought from the mountains of that northern region of Nipal called Gossain Than. With us it forms a small but very handsome deciduous tree, snow-white with blossom during April and May, and crimsoned with bunches of bright-red haws in the months of September and October.

Our drawing was made in the Garden of the Horticultural Society, in which is a fine plant, raised from seeds received from the Honourable Court of Directors of the East India Company. It is perfectly hardy, and may be increased abundantly by grafting upon the Whitethorn stock.

When we published, some years since, a revision of the genera of

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[*] Derived from *Cotonea* (malus), the old name of the Quince; and *aster,* a corruption of *ad instar,* similar. The genus, and this species in particular, is not unlike the Quince.

Pomaceæ, but four species of Cotoneaster were known to us. Since that time the genus has increased to twelve, chiefly by the discoveries of Dr. Wallich, of whose materials we have been most liberally allowed the use, and by whose permission the following account, as far as the Indian species of that distinguished Naturalist are concerned, is published. Want of space prevents our speaking in detail of the species; but the succeeding enumeration, with amended characters of such as require them, will, we doubt not, be acceptable to the scientific world.

§ Folia decidua.

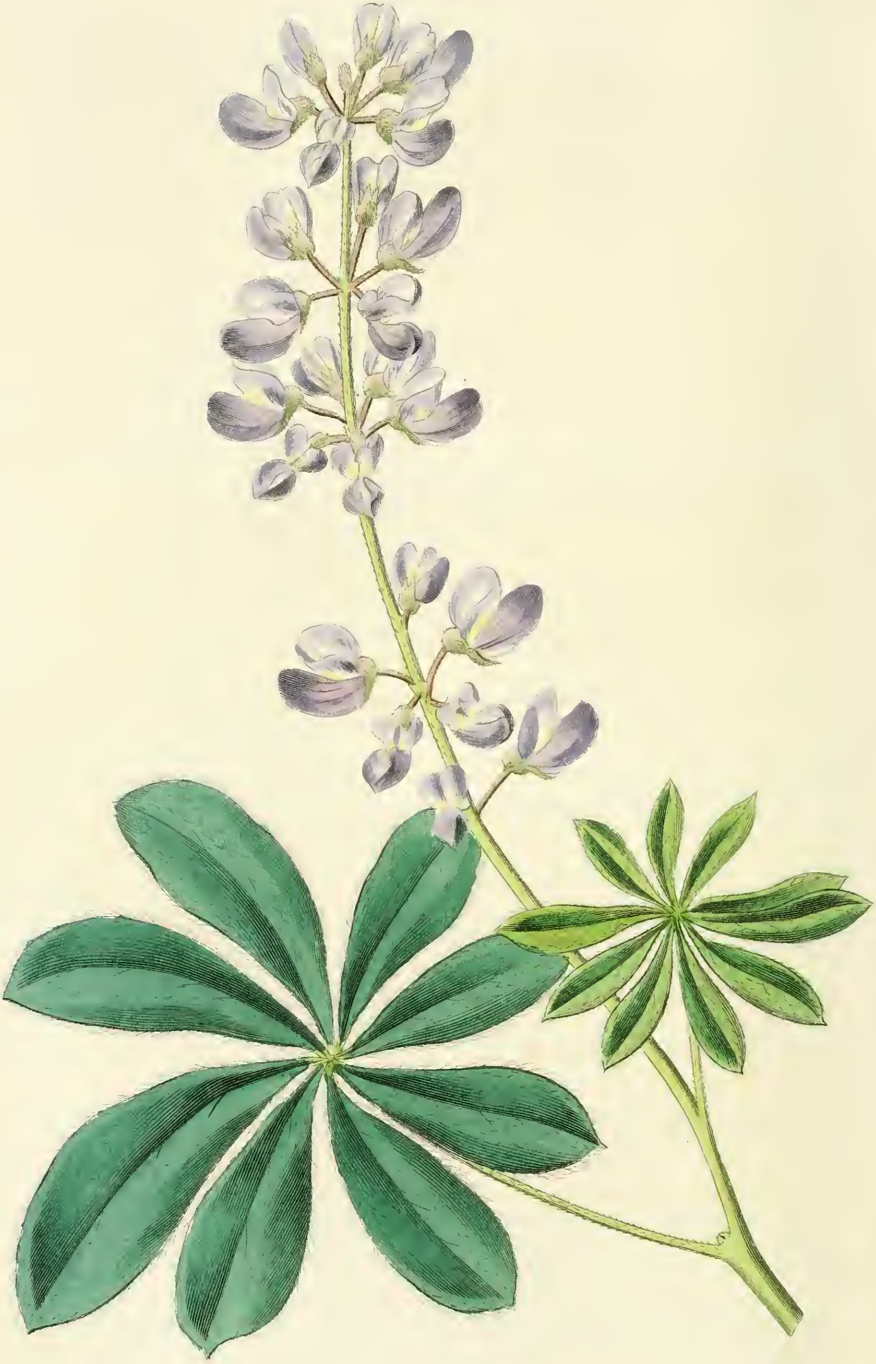
1. C. *vulgaris.* Lindley.
2. C. *tomentosa.* Lindley.
3. C. *melanocarpa.* Fischer.
   Perhaps a mere variety of C. vulgaris.
4. C. *laxiflora.* Jacquin in litteris.
   C. cymis multifloris compositis glabris, foliis ovalibus utrinque obtusis subtùs lanatis deciduis.
5. C. *affinis.* Lindley.
   C. cymis multifloris ramulisque novellis lanuginosis, foliis ovatis obovatisve subtùs tomentosis deciduis, caule fruticoso.
   Hab. in montibus *Nipaliæ* et *Sermore.*
6. C. *frigida.* Wallich in hoc loco.
7. C. *obtusa.* Wall. ined.
   C. cymis multifloris congestis ramulisque glabris, foliis ovatis obovatisve subtùs glabris deciduis.
   Hab. in *Kamoon* et *Nipal* montibus, Himalayam versùs.
8. C. *bacillaris.* Wall. ined.
   C. cymis multifloris divaricatis ramulisque pilosis, foliis obovatis in petiolo acuminatis subtùs glabris deciduis.
   Hab. in *Kamoon.*
9. C. *acuminata.* Lindley.
   C. pedunculis subtrifloris pubescentibus, foliis ovatis acuminatis pubescentibus deciduis.
   Hab. in *Nipaliæ* montibus.

§ § Folia sempervirentia.

10. C. *rotundifolia.* Wall. in Museo Cœtûs Anglicæ Indiæ orientalis.
    C. pedunculis subunifloris, foliis subrotundis subtùs pilosis sempervirentibus.
    C. microphylla; *var.* Uva Ursi. *Lindl. in bot. reg. fol.* 1187.
    Hab. in *Gossain Than.*
    Native specimens have convinced us that this is a distinct species from C. microphylla.
11. C. *microphylla.* Wall. in bot. reg. fol. 1114.
    C. pedunculis subunifloris, foliis oblongis cuneatis subtùs pubescentibus sempervirentibus.
    Hab. in *Gossain Than.*
12. C. *buxifolia.* Wall. ined.
    C. pedunculis trifloris lanuginosis, foliis ovatis subtùs lanuginosis sempervirentibus.
    Hab. in Jugo *Neelghiry* dicto, ubi legit dom. Noton.

This last is no doubt the plant spoken of by M. Decandolle in his *Prodromus,* under C. affinis, as coming from the Neelghiry, with leaves only a line long. J. L.

1230



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LUPÍNUS* arbústus.

Half-shrubby Lupine.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ.
LUPINUS.—*Suprà, vol.* 13. *fol.* 1096.

L. *arbustus;* perennis, floribus alternis pedicellatis bracteolatis, calycis labio superiore bifido: inferiore integro acuto, foliolis 7-13 obovato-oblongis utrinque sericeis, leguminibus 3-5-spermis. *Douglas journ. ined.*

Caulis *teres, albus, glaber, subdecumbens, pedalis v. sesquipedalis.* Foliola 7-13, *oblonga, utrinque parcè sericea;* stipulis *parvis, subulatis.* Flores *alterni, v. obscurè verticillati.* Pedicelli *breves.* Calyx *villosus; labio superiore leviter bifido, obtuso, inferiore integerrimo, acuto.* Bracteolæ *minimæ, deciduæ.* Vexillum *obcordatum, cæruleum, medio purpureum, majusculum.* Alæ *et* carina *roseæ; hac ciliatâ.* Legumen *apice latius,* 3-5-*spermum; semina parva, alba.* Douglas.

In almost every one of our recent Numbers we have had to record a new perennial Lupine, from the stores of Mr. Douglas. We have now to add another to the list, scarcely inferior in beauty to any that have preceded it.

"It is very local in its range," as we are informed by our enterprising friend, "growing only in gravelly soils in North California, invariably under the shade of solitary pines or oaks among coppice-wood. It is common near Fort Vancouver, flowering in May and June. Its nearest affinity is with Lupinus laxiflorus of the present work."

Our drawing was made in the Garden of the Horticultural Society in August last.

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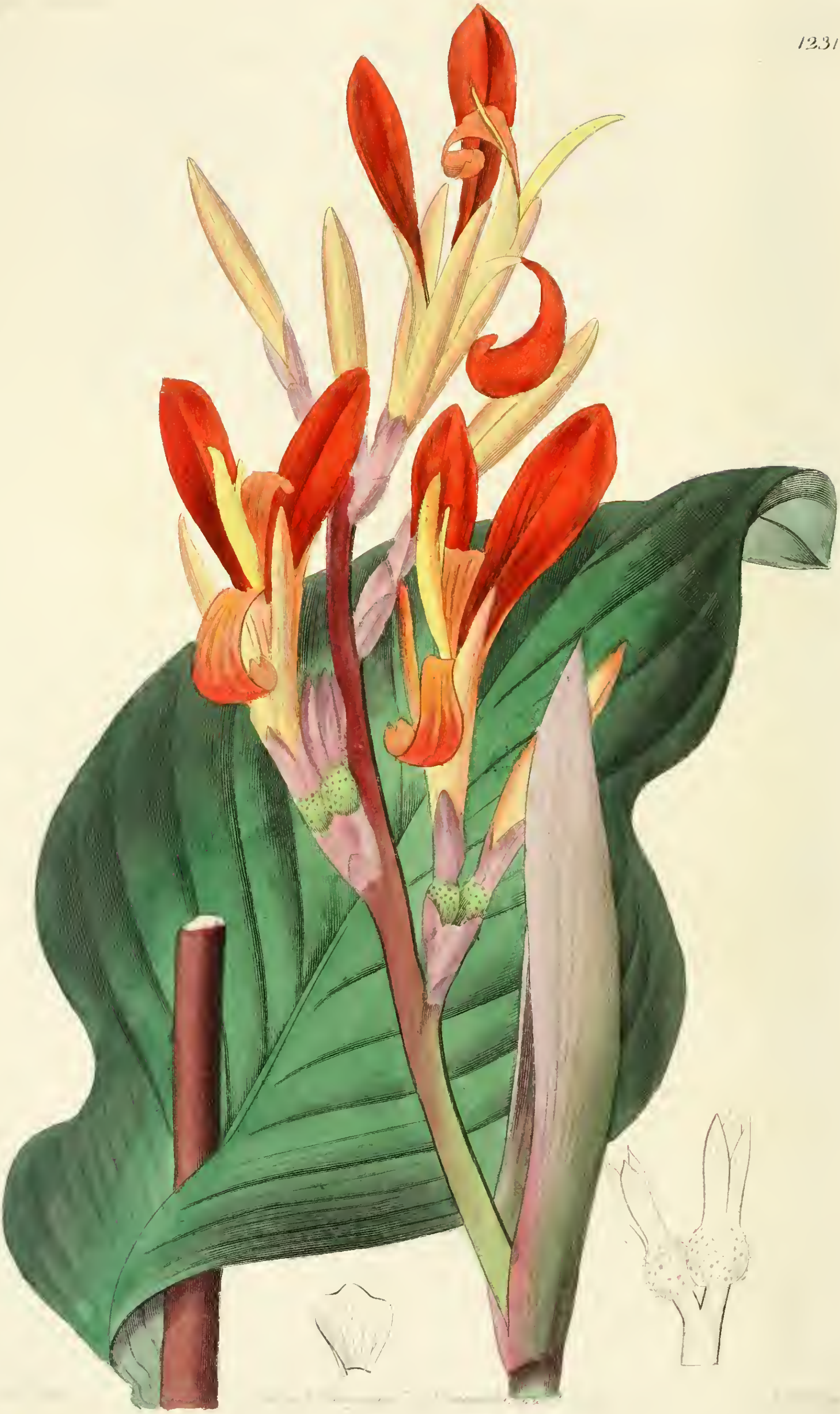
* See fol. 1198.

The following is Mr. Douglas's description of the species : —

" *Stem* round, white, nearly smooth, somewhat decumbent, a foot to a foot and a half high. *Leaflets* 7-13, oblong, thinly but finely silky on both sides. *Stipules* small, subulate. *Flowers* alternate, or obscurely whorled. *Pedicels* short. *Calyx* villous, upper lip slightly divided, obtuse, under lip entire, acute. *Bracteolæ* minute slender processes, deciduous. *Vexillum* obcordate, blue, purple in the centre, large in proportion to the alæ. *Alæ* and *carina* rose colour ; *carina* ciliate. *Pod* somewhat broader at the apex, 3-5-seeded. *Seeds* small, white."

J. L.



1231

CÁNNA* díscolor.

Crimson-leaved Canna.

MONANDRIA *MONOGYNIA.*

Nat. ord. CANNEÆ.
CANNA. — *Suprà, vol.* 7. *fol.* 576.

C. *discolor;* foliis discoloribus, corollæ limbo interiore 3-petalo, petalo inferiore emarginato, floribus didymis pedunculatis, bracteis cuneatis convolutis farinosis pedunculi longitudine.

Caulis 10-*pedalis.* Folia *ovato-oblonga, intensè sanguinea, præsertim versùs fastigium.* Spatha 3-4 *uncias longa, circa basin inflorescentiæ convoluta, glaucedine copiosâ induta.*

A living plant of this species was sent from the Botanic Garden, Trinidad, by Sir Ralph Woodford, the late Governor, to A. B. Lambert, Esq., in whose Hothouse at Boyton, the specimen was produced from which the accompanying drawing was made in November last.

Mr. Lambert informs us that he succeeded in flowering the species, after some difficulty, by continually cutting off its suckers, and keeping it growing in rich mould, in a very warm stove. The stem of the plant that flowered was 10 feet high.

J. L.

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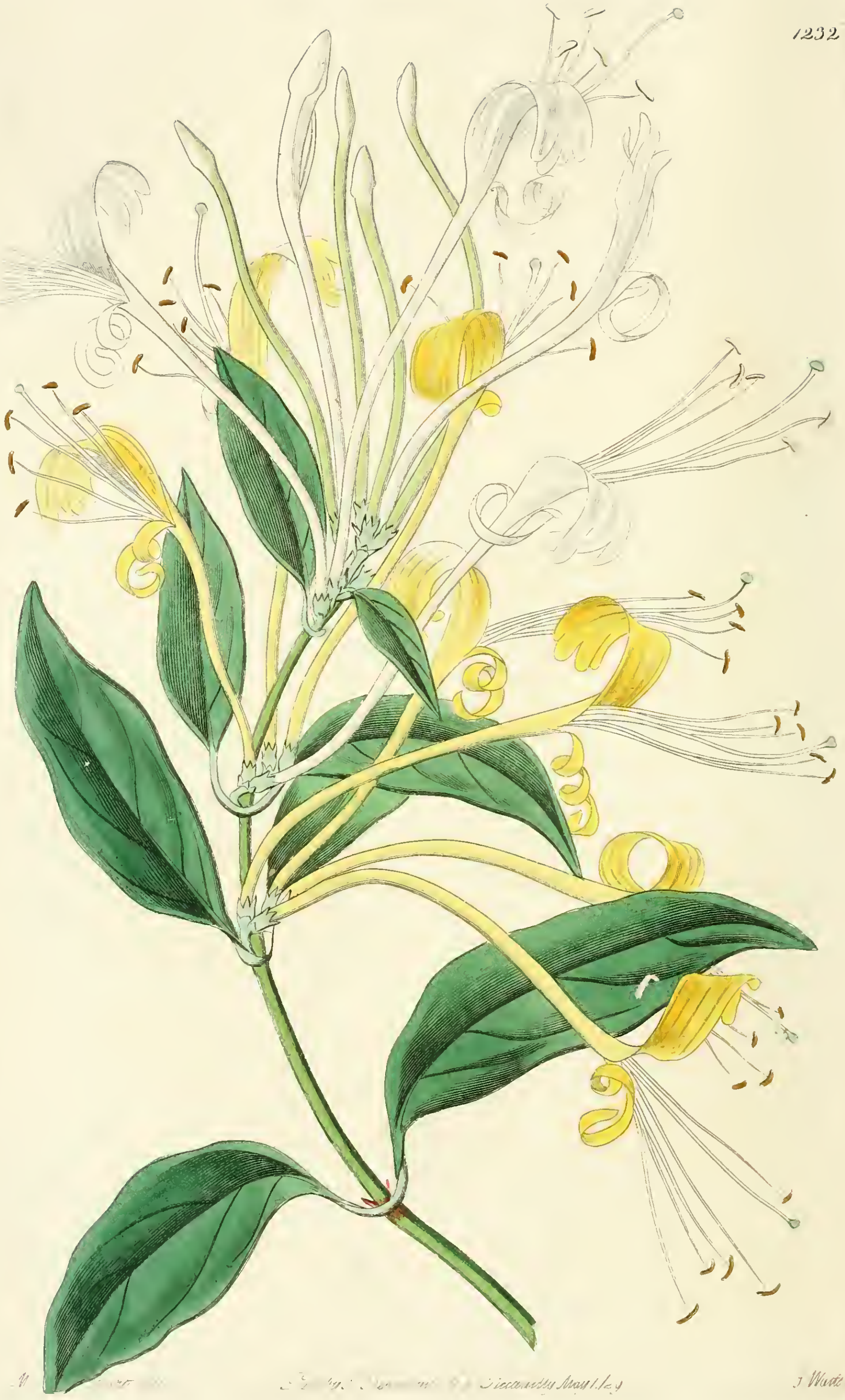
[*] *Can* or *cana*, the Celtic name of the reed, is said to have given rise to this, and many other words in ancient and modern languages; such as *cane, canoe,* &c.

1232



[illegible] [illegible] Piccadilly May 1.1829 J. Watts

CAPRIFÓLIUM* longiflórum.

Long-flowered Honeysuckle.

PENTANDRIA *MONOGYNIA.*

Nat. ord. CAPRIFOLIACEÆ. § *Lonicereæ.*

CAPRIFOLIUM Tournef. — *Calyx* 5-dentatus, persistens. *Corolla* tubulosa, 2-labiata, basi sæpiùs saccata. *Stamina* 5. *Ovarium* 3-loculare, loculis omnibus polyspermis. *Bacca* unilocularis, monosperma.——Frutices *volubiles*, foliis *simplicibus*, floribus *capitatis odoratis.* — Lindley's Synopsis of the British Flora, 1. p. 131.

C. *longiflorum;* foliis oblongo-lanceolatis glabris suprà lucidis, floribus didymis, pedunculo petioli longitudine, ovariis glabris, corollæ tubo filiformi.

C. longiflorum. *Sabine MSS.*

Frutex *volubilis, undique depilatus.* Rami *teretes.* Folia *oblongo-lanceolata, petiolata, pallidè viridia, subtùs pallidiora, suprà glabra.* Flores *didymi, pedunculo communi petioli longitudine.* Bracteæ *calycisque laciniæ ovatæ, illarum lateralibus minoribus, rotundatis.* Corolla *ochroleuca, glabra, tubo 3-unciali, filiformi.* Baccæ *pisiformes, albæ.*

This plant has quite the habit of Caprifolium japonicum; but it is wholly destitute of the hairs of that species, and its fruit is white, not black. In many respects it is the same as Dr. Wallich's Lonicera glabrata; but the short flowers and black fruit of that species distinguish it.

We see nothing among the Nipal or Indian specimens of C. japonicum, which our friend Dr. Wallich has allowed us to examine, that approaches this; they appear very constant in their form, and all referable to the same species. Mr. Don has distinguished among them two; but we cannot find any Nipal specimens agreeing with the character he assigns to his Caprifolium japonicum; and we feel doubts whether his C. macranthum is essentially different from the true C. japonicum of Thunberg; it certainly is not from that of the Flora Indica. The Nipalese specimens are more vigorous than those of our Gardens, and hirsute rather than tomentose; the leaves are also more elliptical: but these characters are scarcely sufficient to distinguish a species.

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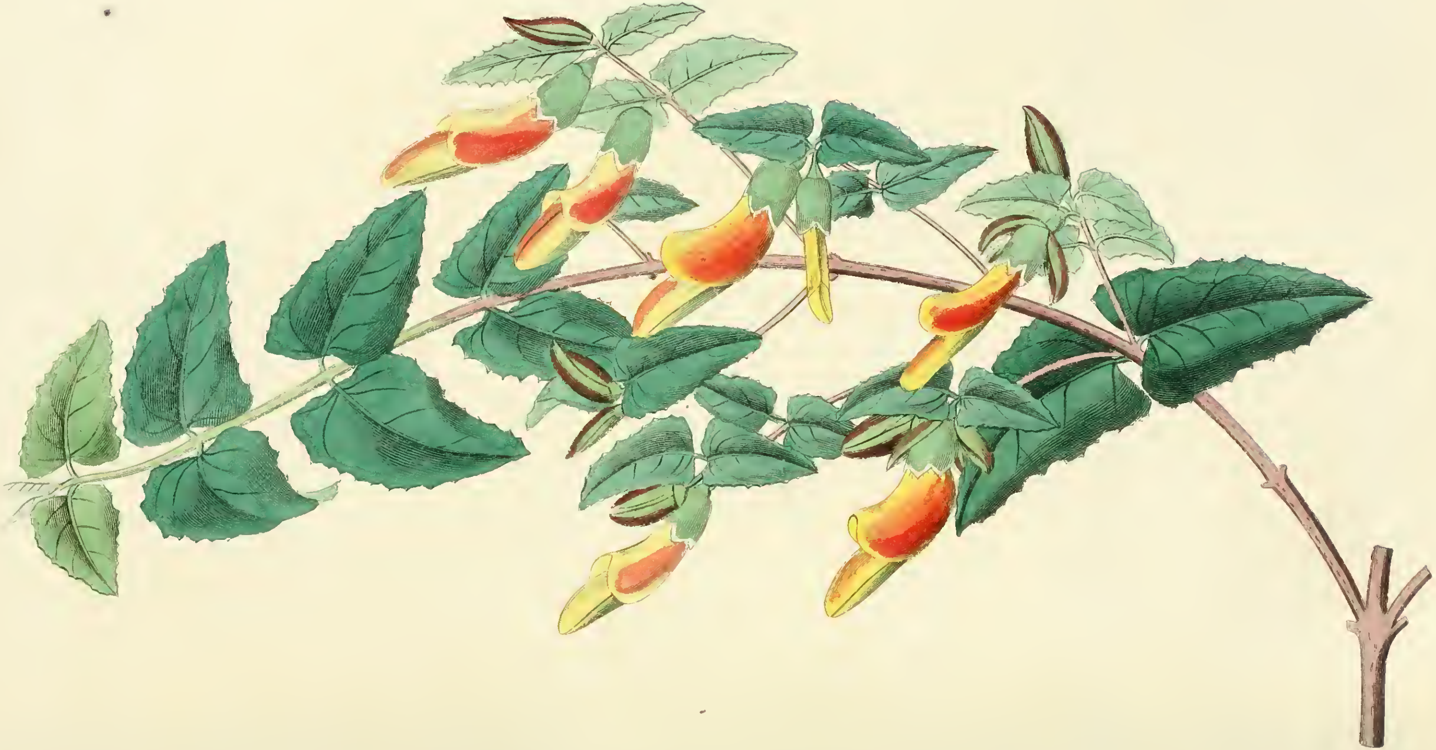
* From *capra,* a goat, and *folium,* a leaf; a metaphorical name, alluding to the power of these plants of scrambling up hedges and rough places, as goats up rocks.

It is a native of China, whence plants were sent to the Horticultural Society by Mr. Reeves, in 1826. A hardy, climbing shrub, flowering from July to September.

J. L.

1233.



SCÓTTIA* dentáta.

Tooth-leaved Scottia.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ. § *Loteæ.*

SCOTTIA R. Br. — *Calyx* bracteis imbricatus, 5-dentatus, dentibus parùm inæqualibus. *Vexillum* complicatum brevius alis carinam æquantibus. *Stamina* omnia connexa. *Legumen* pedicellatum compressum, margine utroque incrassato. *Semina* 3-4 strophiolata. — *R. Br. in H. Kew. ed.* 2. 4. 268.

Scottia dentata. *R. Brown l. c. Decand. prodr.* 2. 118.

Frutex *ramosus, diffusus, ramulis filiformibus, verrucosis.* Folia *opposita, subsessilia, cordato-triangularia, inæqualiter dentata, reticulata, glabra.* Flores *solitarii, axillares, subsessiles.* Bracteæ *sub calyce quinque, quarum* 2 *exteriores parvæ, truncatæ, inæquales, persistentes, leviter pubescentes, basin calycis calyculi instar ambientes,* 3 *interiores cymbiformes, æquales, calycis longitudine, glabriusculæ, citò deciduæ.* Calyx *campanulatus, subæqualis, quinque-dentatus, ad os subpubescens.* Vexillum *abbreviatum, cum carinâ subparallelum.* Alæ *et* carina *oblongæ, obtusæ, conniventes.* Stamina *altè connata, subpubescentia.* Ovarium *longipedunculatum, trispermum, attenuatum in stylo setaceo.* Stigma *simplex.*

A native of the South-west coast of New Holland, whence, according to the *Hortus Kewensis,* it was introduced by Mr. Peter Good, in 1803. It has, however, always been so scarce a plant, that, notwithstanding its great beauty, it is hardly ever seen in Collections. Our drawing was made at Mr. Mackay's Nursery at Clapton, in December last.

A hardy greenhouse plant, exceedingly deserving of cultivation.

A branching, diffuse shrub, with filiform, warted branches. *Leaves* opposite, subsessile, cordate-triangular,

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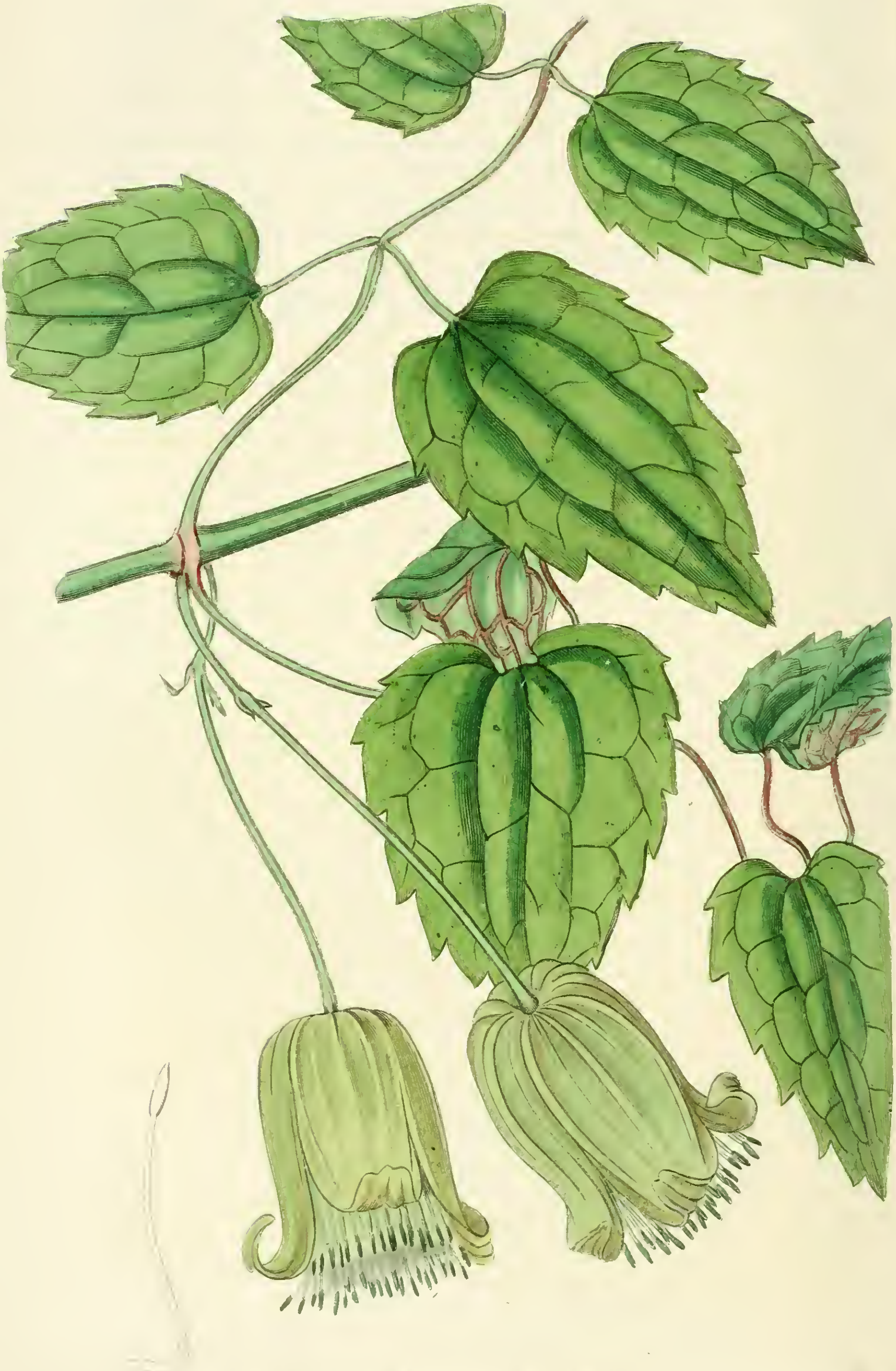
[*] Named after a Dr. Robert Scott, a Professor of Botany at Dublin.

unequally toothed, smooth. *Flowers* solitary, axillary, subsessile. *Bracteæ* close under the calyx, 5, of which the two outermost are small, truncate, unequal, persistent, slightly pubescent, surrounding the base of the calyx like a little cup; the three interior boat-shaped, equal, the length of the calyx, smoothish, quickly deciduous. *Calyx* campanulate, nearly equal, 5-toothed, slightly pubescent about the orifice. *Standard* short, nearly parallel with the wings. *Wings* and *keel* oblong, obtuse, connivent. *Stamens* united in a long tube, somewhat pubescent. *Ovarium* on a long stalk, 3-seeded, tapering into a bristle-shaped style. *Stigma* simple.

J. L.

1234



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CLÉMATIS* chlorántha.

Green-flowered Clematis.

POLYANDRIA *POLYGYNIA.*

Nat. ord. RANUNCULACEÆ.
CLEMATIS. — *Suprà, vol.* 2. *fol.* 97.

§ IV. Dec. *Pedunculis solitariis, unifloris, foliis pinnatis, rariùs ternatis.*

C. *chlorantha;* pedunculis unifloris, sepalis oblongis campanulatis tomentosis, foliis pinnatis; foliolis ovatis acuminatis serratis membranaceis subpilosis, caule scandente piloso.

Caulis *tenuis, altè scandens, striatus, junior pilosus.* Folia *pallidè viridia, membranacea, subpilosa, pinnata, petiolis tortuosis, foliolis ovatis v. ovato-oblongis, acuminatis, inæqualiter serratis, serraturis divergentibus, apiculatis.* Flores *solitarii, pedunculis gracilibus, foliis brevioribus, tomentosis, versùs basin bi-bracteolatis, campanulati, pallidè luteo-virides.* Sepala *oblonga, tomentosa.* Stamina *pilosa.*

A native of Sierra Leone, whence seeds were sent to the Horticultural Society by Mr. George Don, in 1823. It is a tender, rather delicate, stove climber, not flowering very readily. Our drawing was made in the Chiswick Garden, in August 1827.

Stem slender, climbing to a great length, striated, when young hairy. *Leaves* pale green, membranous, somewhat hairy, pinnated, with tortuous petioles; *leaflets* ovate, or ovate-oblong, acuminate, unequally serrated; the serratures diverging and apiculate. *Flowers* solitary, campanulate, pale yellowish green; *peduncles* slender, shorter than the leaves, tomentose, with two little bracteæ towards the base. *Sepals* oblong, downy. *Stamens* hairy.

J. L.

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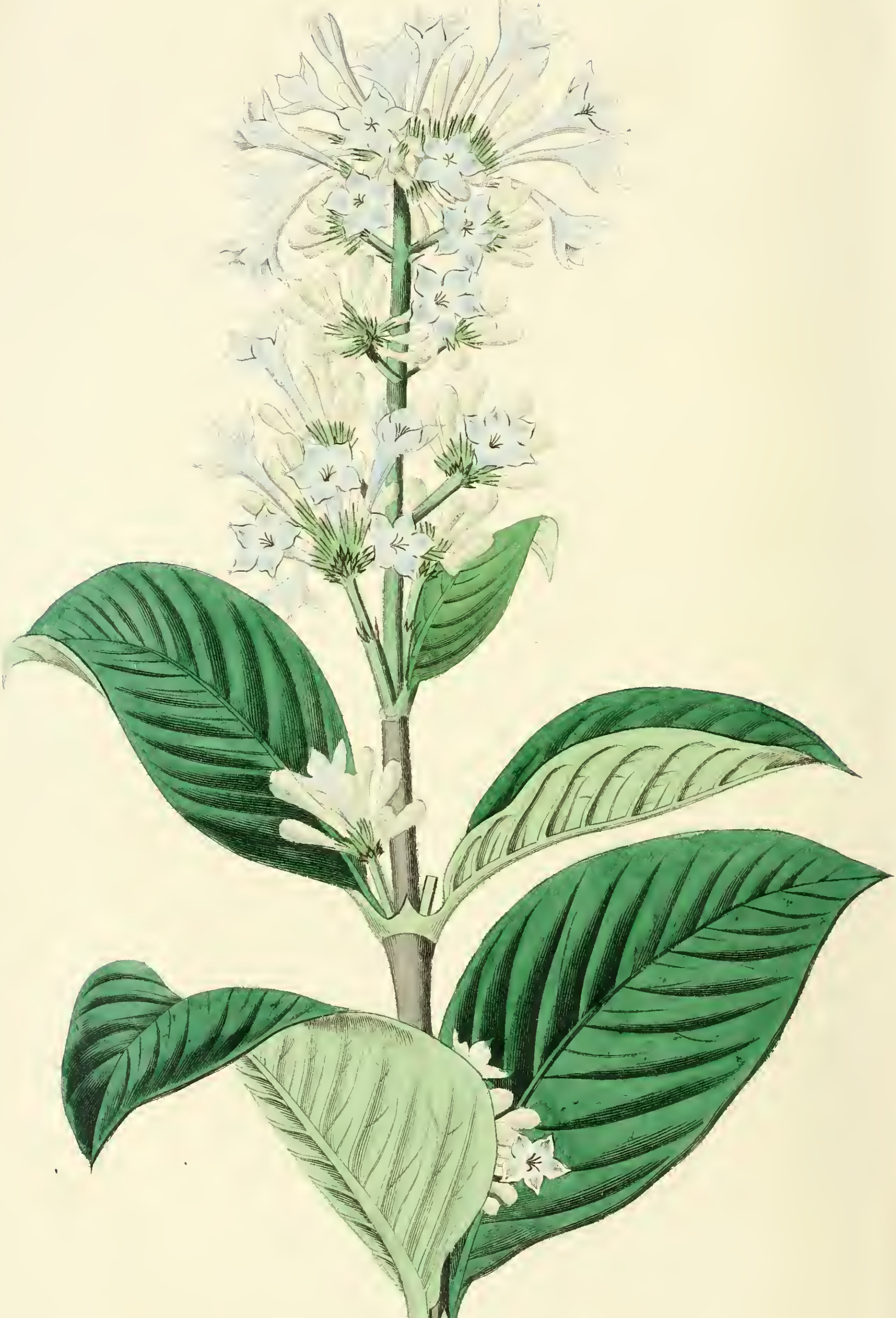
* Κλῆμα is the young scrambling shoot of the vine: hence the Greeks formed κληματὶς, as the name of the Periwinkle; which moderns have misapplied to the genus now bearing the name of Clematis. Chlorantha is from χλωρὸς, pale green, and ἄνθος, a flower.

1235



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1235

SPÉRMADĪCTYON* azúreum.

Azure-flowered Netseed.

PENTANDRIA *MONOGYNIA.*

Nat. ord. RUBIACEÆ.
SPERMADICTYON.—Suprà, vol. 4. *fol.* 348.

S. *azureum;* hirsutum, foliis oblongo-lanceolatis acuminatis, floribus paniculatis.
Spermadictyon azureum. *Wallich in Fl. Ind.* 2. 225. (1824.)
Hamiltonia scabra. *Don prodr. Fl. Nep.* 137. (1825.)
Spermadictyon scabrum. *Spreng. syst.* 4. *pars* 2. *p.* 73.

Speaking of Spermadictyon suaveolens, Dr. Wallich adverts thus to this species:—

"I have found a marked variety of this shrub, if not a distinct species, in Nipal, where it grows between Hetounra and Bheempedi, chiefly between *Bhinsadoban* and the last-mentioned village, forming the most extensive thickets, which are rendered still more beautiful by the snow-white flowers of *Porana paniculata.* I have also met with it about the village near *Cheeshagurree,* and on several mountains in the valley itself: my people have brought it to me from Noakote. It perfumes the air by its delicious fragrance from November until March, during which time it is indescribably beautiful. It differs from *suaveolens* chiefly in the colour of its flowers, which are azure blue, and in the hairiness of most of its parts. It grows to a shrub of 10 to 12 feet high, well furnished with branches. As the stem gets old, its epidermis becomes smooth and ash-coloured. *Branches* covered with pale, soft hairiness, widening at the divisions and insertions of the leaves; while young reddish, very slender. *Leaves* from 5 to 8 inches

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[*] So named by Mr. Brown, from σπέϱμα, a seed, and δίκτυον, a net, with reference to the beautiful net-like arillers with which the seeds are said to be covered.

long, with a lengthened acumen, base acute, the upper surface pubescent, the under one with numerous opposite, oblique, parallel nerves, which, together with the strong rib and reticulate veins, are villous. *Petioles* very short. *Stipules* broad and short, adpressed, soon withering, ending in a subulate acumen, at the base of which there are on each side one or two crenatures. *Inflorescence* most ample, densely villous, especially the corols, which are of a delightful sky-blue colour. *Ovarium* somewhat 5-cornered. In every other respect the two plants agree. How far mine should be considered as a variety only, or a distinct species (which I would propose calling S. *azureum*), I must leave undecided, until the young plants, which were brought down with me, shall come to a proper age. It is worth observing, that all its tender parts and the flowers, on being bruised, as also in decaying, emit a peculiarly fetid smell, precisely as is the case with similar parts of *Serissa* and *Pæderia fœtida*, and some others. When out of flower the shrub looks for some time peculiarly withered and poor, in consequence of the unusual time during which the dried brown panicles remain on the branches."

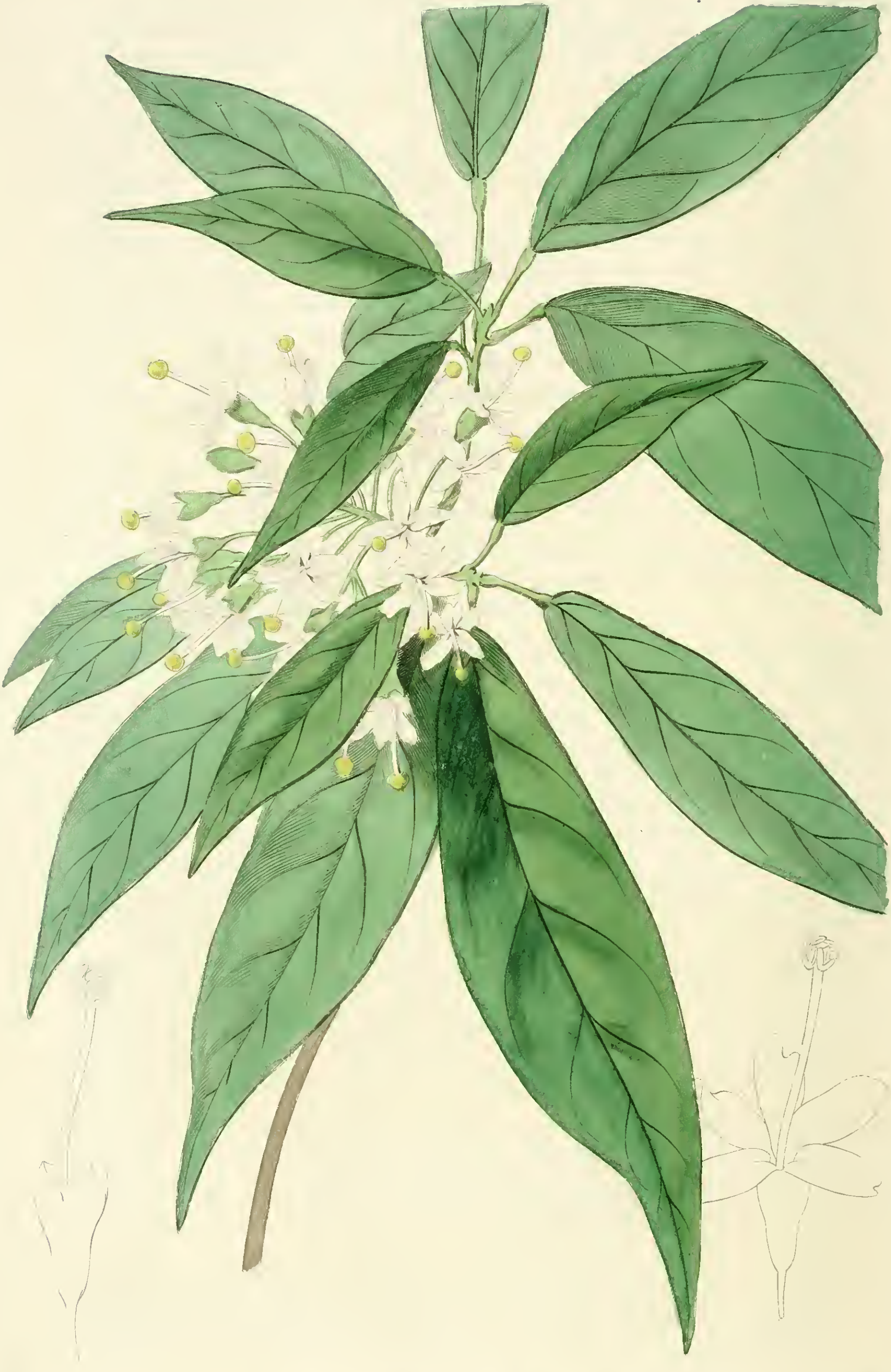
Such is the account given of this in the second volume of the *Flora Indica*, published in 1824. Upon what ground Mr. Don altered Dr. Wallich's name *azureum* to that of *scabrum*, we do not understand; nor why he altogether omitted the Flora Indica synonym of *Sp. azureum.* With regard to the name Hamiltonia, applied to this genus by Dr. Roxburgh, we are clearly of opinion that Spermadictyon is preferable; not that we admit any right on the part of Willdenow to change Michaux's name of Pyrularia for that of Hamiltonia, but that it is now too late to remedy the act; Hamiltonia is at this day universally applied to the American genus, and cannot without inconvenience be removed: besides, we think that some attention is due to the opinion of Mr. Brown, with whom the name of Spermadictyon, which, by the way, is unexceptionable, originated.

There can be little doubt that Dr. Wallich's Leptodermis, combined by Mr. Don with this genus, is distinct: the curious manner in which its bracteæ are formed, and the whole habit of the plant, forbid such a combination.

Our drawing was made in January last, in the Garden of the Horticultural Society, from a plant presented by the Honourable Court of Directors of the East India Company.

J. L.

1230.



[illegible] 1829

REÉVESIA* thyrsoídea.

Thyrse-flowered Reevesia.

◆

MONADELPHIA *POLYANDRIA.*

Nat. ord. BYTTNERIACEÆ; *inter Sterculiam (Erythropsin) et Pterospermum.*

REEVESIA. — *Calyx* campanulatus, 5-dentatus, æstivatione imbricatâ, pube stellatâ tomentosus, bracteolatus. *Petala* 5, hypogyna, unguiculata, æstivatione convoluta, callo inter unguem et laminam. *Stamina* in toro longo filiformi insidentia. *Antheræ* 15, sessiles, in cyatho capituliformi, apice tantùm pervio, obsoletè 5-dentato, connatæ, extrorsæ, biloculares, loculis divaricatis, intricatis, longitudinaliter dehiscentibus. *Pollen* sphæricum, glabrum. *Ovarium* sessile, intrà cyathum antheriferum, ovatum, glabrum, 5-angulare, 5-loculare, loculis dispermis. *Ovula* margini loculorum unum super alterum affixa, superiore basi concavo in inferiorem incumbente. *Stigma* 5-lobum, simplicissimum, sessile. *Capsula* stipitata, lignosa, obovata, 5-angularis, 5-locularis, loculicidò 5-valvis, axi nullo. *Semina* cuique loculo duo basi alata.——Arbor (*Chinæ*) foliis *alternis exstipulatis*, racemis *terminalibus compositis*, floribus *albis.* — Lindley in Brande's journ. n. s. 2. 112.

Reevesia thyrsoidea. *Lindley, l. c.*

" In a collection of dried specimens of plants sent to the Horticultural Society from China, by Mr. Reeves, are a few branches, with flowers, of a remarkable genus which is at present undescribed, but which is of so curious a nature, and of such importance with reference to the determination of some natural affinities, that I have thought it deserving immediate record, especially as drawings of the fruit, which have been subsequently obtained from the same indefatigable correspondent of the Society, render its history tolerably complete.

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* Named in honour of John Reeves, Esq., now resident at Canton, to whom we are indebted for our knowledge of this plant; from whose unwearied exertions in the cause of science, the Botany of China has received material assistance; and to whom our Gardens are indebted for many of the fairest ornaments they contain.

" The *branches* appear to be fragments of an evergreen tree; they are slender, rounded, and smooth. The *nascent gemmæ* are covered with a dense rufous pubescence. The *leaves* are alternate, becoming towards the extremities of the branches opposite by approximation; their form is ovate-lanceolate, acuminate, and in size they vary from three inches to nearly six in length; the surface, even of the youngest, is perfectly smooth on each side; their veins are inconspicuous, the lowest pair of venæ primariæ being divergent at an angle of about 40°, while the others spread outwards at an angle of 55° or 60°; the venæ arcuatæ and externæ are obscurely seen, but form together a number of rhomboidal spaces, equal in diameter to nearly one-third of each side of the leaf; the proportion borne by the petiole to the lamina is variable, sometimes equalling one-fourth of the length of the latter, and not unfrequently being less than one-sixth of its length; this proportion not depending upon the station of the leaves: the petiole is smooth, half round, and thickened at the extremity, where it unites with the lamina. *Stipulæ* are none. The *flowers* are greenish white, in terminal thyrsoid compound racemes; the upper part of the *rachis*, and of its branches, is slightly protected by stellate pubescence; the *pedicels* are closely covered with pubescence of the same nature, and have one subulate downy deciduous bracteola at the base, and another towards the apex. The *calyx* is inferior, campanulate, tapering a little towards the base, densely clothed with stellate pubescence, bursting irregularly at the apex into four or five ovate teeth, which are somewhat imbricated during æstivation, but which are separated by the growth of the petals long before the expansion of the flower; the veins of the calyx are remarkably reticulated, and when cut, a considerable quantity of mucilaginous viscid fluid is exuded. The *petals* are whitish green, hypogynous, with a convolute æstivation; their *ungues* are spatulate, and as long as the calyx; their *laminæ* oblong, spreading, flat, and then overlapping each other at the base; at the point of separation of the unguis and lamina is a small callus, and on each side a notch upon the margin. The *stamens* are seated upon a long, filiform, subclavate, smooth torus; the *filaments* are consolidated into a capitate

5-toothed cup, nearly closed at the orifice, and on the outside of this cup are placed the *antheræ*, three to each tooth; the latter are two-celled, with divaricating cells, which open longitudinally, and are so entangled with each other, that the whole surface of the cup appears, when the antheræ have burst, to consist of a single, many-celled anthera. The *pollen* is spherical and smooth. The *ovarium* is seated within the cup of stamens, and is so entirely concealed that it cannot be discovered till some part of the cup is removed by violence; it is ovate, smooth, and formed of five inseparable cells, each of which has two ovula placed one above the other, and attached to their placenta by their inner margin; the *stigma* is sessile, with five radiating lobes. From the Chinese drawing, the half-ripe fruit appears to be fleshy, with five deep angles, and five cells, without any remains of calyx, and with a slight appearance of separation between the lobes. The ripe fruit is an obovate, 5-angled, 5-celled, 5-valved, retuse, woody capsule, with a loculicidal dehiscence, and no separable axis. The seeds are attached one to each side of the valves, and are expanded at their lower end into a wing.

" From this description it is obvious, that, with the single exception of the contents of the seed, we are in possession of all that it is essential to know of the structure of this plant. The next subject of consideration is its affinity.

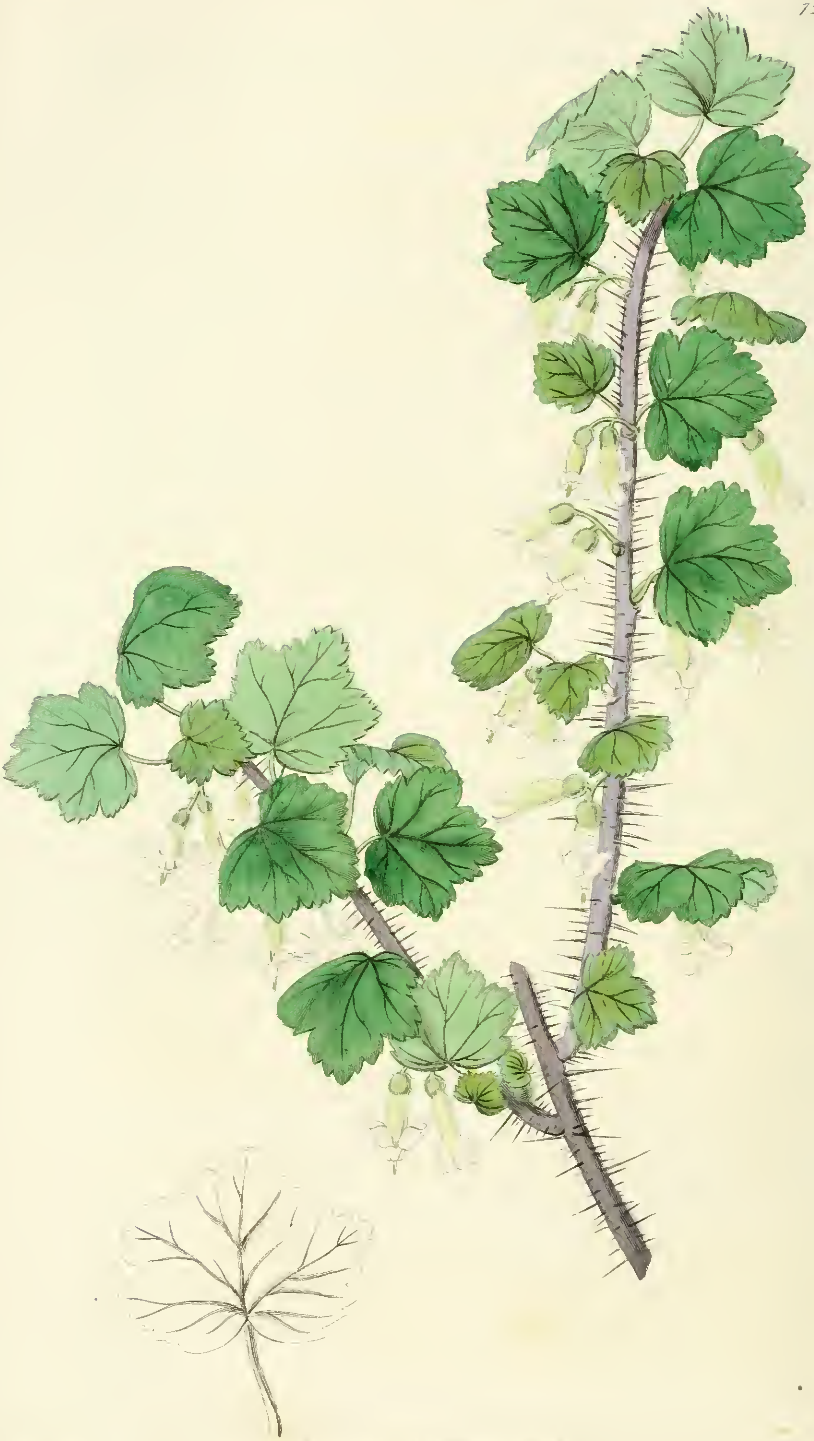
" The stellate pubescence, the thickening of the petiole at the point where it expands into the lamina, the station of the stamens upon a long filiform torus, the external position of the antheræ, and the union of the filaments by threes into a cup surrounding the ovarium, are all characters that forcibly call to recollection the genus Sterculia. The calyx, indeed, in that genus is generally divided much more deeply than in the plant now under consideration, and the antheræ are usually seated at the base of the ovarium; but, on the other hand, in Sterculia colorata of Roxburgh, which, if a distinct genus (*Erythropsis*), as I am inclined to believe, is nevertheless next of kin to Sterculia, the calyx is of the same figure, and divided in the same degree, and the antheræ are also combined in a capitate cup enclosing the ovarium. If, however, we pursue this comparison further, we find that, with the characters now adverted to, the similarity ceases; in Sterculia there are no petals, the calyx has a valvular, not imbricate, æstivation, the cells of the fruit separate into distinct folliculi, and do not combine into a solid woody capsule; and the seeds are destitute of wings.

" The fruit suggests so obviously some affinity with Pterospermum, that it is next necessary to institute a comparison with that genus. Stellate pubescence, a calyx divided into five portions, five hypogynous unguiculate petals, and fifteen fertile stamens united into a cup, seated on a stipitiform torus, and surrounding the ovarium, a 5-celled ovarium, a woody 5-celled capsule, with a loculicidal dehiscence, no axis, and winged seeds; all these characters are common to Pterospermum and our plant: but, on the other hand, the points in which they differ are of much importance. The æstivation of Pterospermum is valvate recurved, not imbricate; its calyx is 5-parted, not 4-5-toothed; its anthers have parallel, not divaricating cells, and are seated upon long distinct filaments, not sessile, upon the outside of a capituliform cup; and, finally, the petioles of the leaves are not connected with the lamina by a thickened space. The seeds are also winged at the apex, not at the base; but upon this point it is not my wish to insist.

" If the comparison thus instituted with Pterospermum and Sterculia be attentively considered, we cannot fail to remark, that the subject of these observations is nearly equally related to both; to Pterospermum in its petals and fruit, to Sterculia in its calyx and stamens. It must, therefore, be stationed between those two genera; thus confirming the propriety of M. Kunth's combination of the Sterculiaceæ of Ventenat with the Byttneriaceæ of Mr. Brown; and, in fact, breaking down every barrier between them."—*Lindley, l. c.*

Such was the account of this plant which we communicated to Mr. Brande's Journal in September 1827. At that time we only knew it from dried specimens. The accompanying figure was made from a plant that blossomed in the Garden of the Horticultural Society in January 1829: it had been brought from China by Mr. John Damper Parks, and is in all respects the same as the Chinese specimens. It is a handsome greenhouse, evergreen shrub. J. L.

1237.



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RÍBES* setósum.

Bristly-stemmed Gooseberry.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Grossulaceæ.
RIBES.— *Suprà, vol.* 2. *fol.* 125.

R. *setosum;* ramis densè setosis, aculeis inæqualibus subulatis, foliis subrotundis basi cordatis pubescentibus 3-5-lobis altè crenatis, pedunculis bi-floris subbracteatis, calycibus tubulato-campanulatis; laciniis linearibus obtusis patentibus petalis integerrimis duplò longioribus, baccis hispidis.—*Lindley in hort. trans.* 7. *p*. 243.

" Plants of this undescribed Ribes were presented to the Society by Messrs. Loddiges, with the name of the Missouri Gooseberry. It is a low bush, having its branches densely covered with setæ; among which, particularly about the bases of the young branches, are intermixed many unequal, straight, subulate aculei. The *leaves* are roundish, deeply cordate, covered, as well as their stalks, with a minute glandular pubescence; the margin is 3- or 5-lobed, or angled, with numerous, nearly roundish, incisions. The *flowers* are white, tubular, and about half as long as those of R. aureum, appearing in pairs, and hanging in profusion from beneath the branches. *Berries* black, spherical, and hispid, with a subacid pleasant flavour, a little partaking of musk.

" This is a very desirable species; and although not

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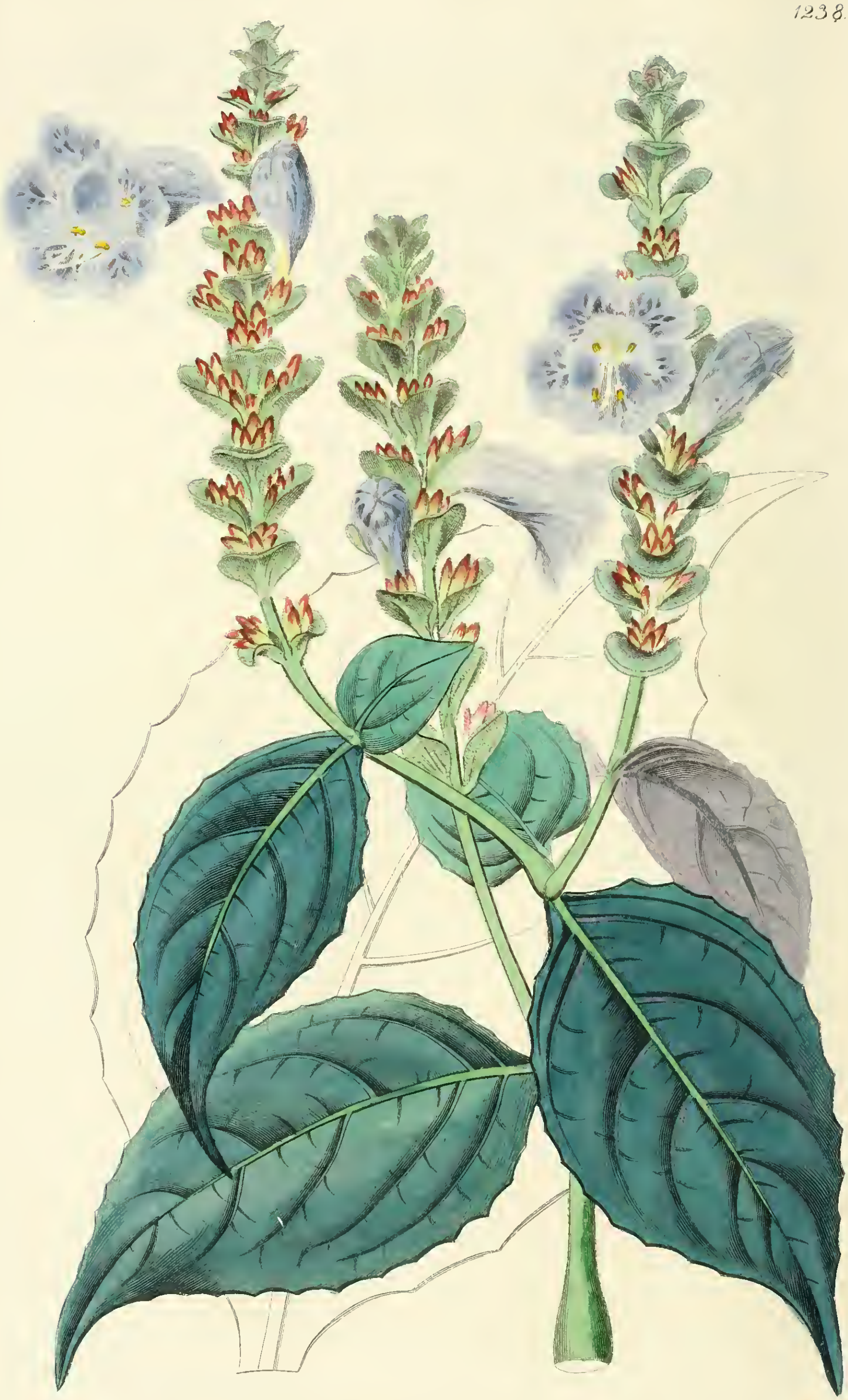
[*] The Arabian physicians of the eleventh and twelfth centuries had a famous medicinal plant which they called Ribas. This, being described as bearing subacid berries, was for a long time supposed to be our Currant or Gooseberry; but it is now pretty well made out, that the Arabian Ribas was the kind of rhubarb by moderns called Rheum Ribes.

so showy as the long-flowered American Currants with coloured calyces, is by far the most ornamental of all the Gooseberries yet in our Gardens. The fruit possesses no merit: it ripens in July." — *Hort. Trans. l. c.*

It appears from specimens brought home by Mr. Douglas to be a native of the banks of the Sascatchewan River, in North America. Our drawing was made in the Garden of the Horticultural Society, in May 1826. It is readily increased by cuttings.

J. L.



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RUÉLLIA* Sabiniána.

Mr. Sabine's Ruellia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. Acanthaceæ.
RUELLIA. — *Suprà, vol.* 7. *fol.* 585.

R. *Sabiniana* ; foliis ovato-lanceolatis denticulatis glabris subtùs discoloribus, bracteis cuneatis glandulosis retusis corollis ventricosis 4-plò brevioribus.
R. Sabiniana. *Wallich MSS.*

Caulis *suffruticosus, 2-3 pedalis, ramosus, geniculatus, quadratus, ad nodos tumidus, subpurpureus.* Folia *subsessilia, ovato-lanceolata, acuminata, denticulata, glabra, subtùs discolora.* Spicæ *terminales et axillares, multifloræ, semipedales.* Bracteæ *foliaceæ, persistentes, cuneatæ, retusæ, glandulosæ, purpurascentes.* Flores *solitarii.* Calyx *5-fidus, basi à tergo bi-bracteolatus, laciniis subæqualibus, foliaceis, purpurascentibus, glandulosis, tubo brevi pallido, subeglanduloso.* Corollæ *magnæ, lilacinæ, ventricosæ, venosæ, bracteis quadruplò longiores.*

This extremely beautiful flower, which will probably become one of the choicest ornaments of our Hothouses, has been named by Dr. Wallich in compliment to Joseph Sabine, Esq., F.R.S., &c. &c., the indefatigable Secretary of the Horticultural Society. It is a native of the Pundica Mountains, bordering on the district of Sylhet, whence it was introduced to the Botanical Garden, Calcutta, in 1824; but up to 1828 it had not flowered there.

The leaves when young are of a deep purple on their lower side; the flowers are of a delicate, very transparent violet blue; and the bracteæ, which remain long after the flowers have fallen, being of a warm lavender colour, and closely covered with transparent glands, give an air of beauty to the plant when the flowers themselves have fallen.

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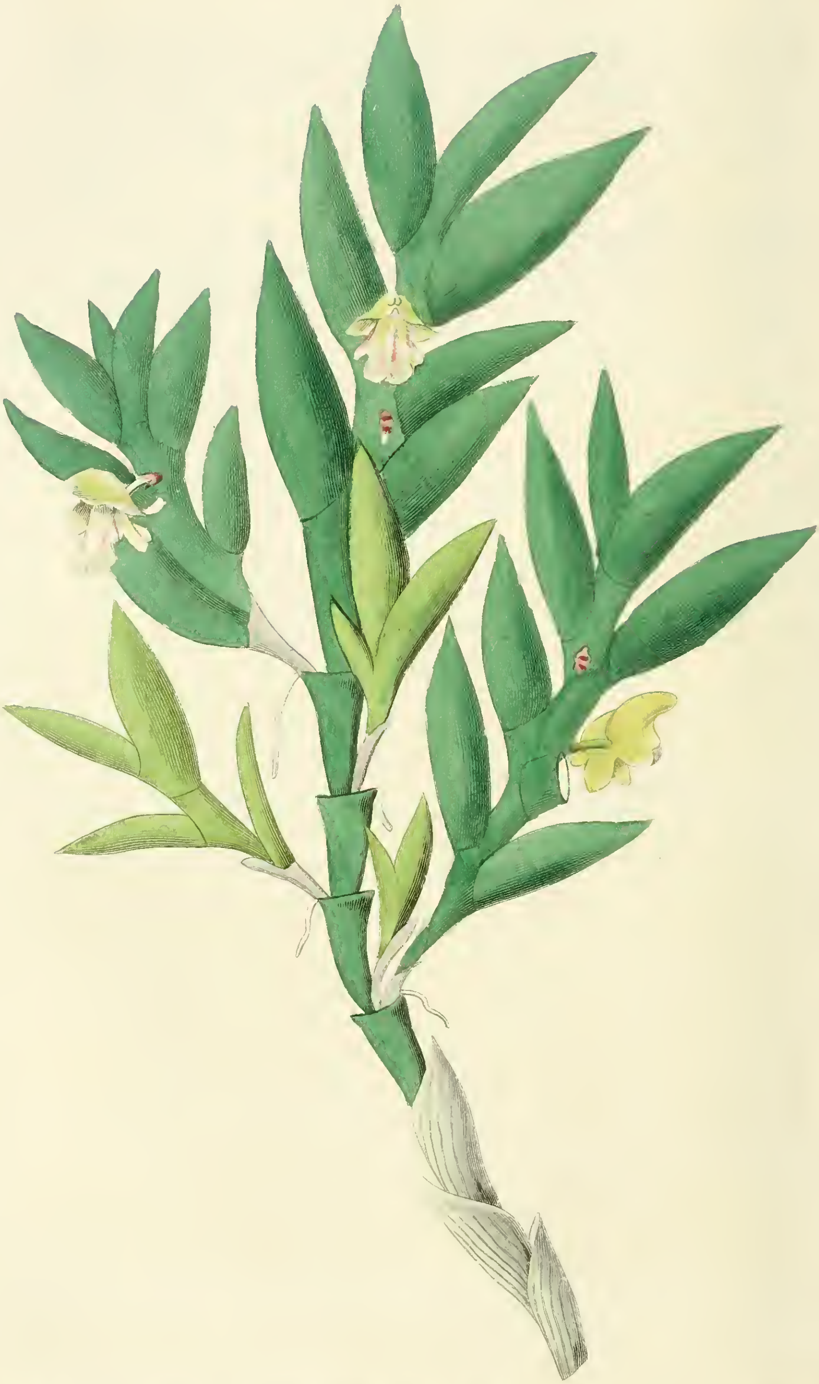
* Jean Ruelle, after whom this genus has been named, was a French Botanist, born at Soissons in 1474, and died in 1537. He was at one time physician to Francis I., but afterwards abandoned medicine, and became a priest. In 1529, he published a good translation of Dioscorides; and in 1536, a work, *De Naturâ Stirpium*, which is chiefly remarkable as the first attempt to reduce into order the nomenclature of Botany; it was, in fact, the first introduction to Botany: that by Fuchsius, his contemporary, to his *Historia Stirpium*, in 1542, was the second.

It is a tender, greenhouse plant, propagated by cuttings: a cold greenhouse would not suit it, and a stove appears to be too hot for it.

J. L.

1239.



M. Hart del. Pub. by J. Ridgway 169 Piccadilly May. 1829. [illegible] sc.

1239

DENDRÓBIUM* ánceps.

Two-edged Dendrobium.

GYNANDRIA *MONOGYNIA.*

Nat. ord. ORCHIDEÆ. § *Malaxideæ.* Lindley.
DENDROBIUM.—*Suprà, vol.* 7. *fol.* 548.

D. *anceps;* caule ancipiti simplici, foliis distichis scapelliformibus planis, pedunculis binis è basi vaginarum brevissimis. *Swartz act. holm.* 1800. *p.* 246. *Willd. sp. pl.* 4. 136. *Spreng. syst.* 3. 738.

Caules *numerosi, compressi, carnosi, penduli.* Folia *disticha, carnosa, compressa, ovato-oblonga, acuta, pallidè viridia.* Flores *solitarii, herbacei.* Sepala *ovata, erecta, acuta, interiora minora, inferiora cum basi productâ columnæ longè connata.* Labellum *unguiculatum, ecallosum, inappendiculatum, articulatum, cuneatum, emarginatum, crenulatum, paululùm coloratum.* Stigma *bicallosum intrà cavitatem.* Pollinia 4, *didyma, libera, collateralia.* Anthera *pedicellata.*

An inhabitant of the trunks of trees in swampy, low situations, in the æstuaries of the rivers of Bengal and Pegu, according to Dr. Wallich, to whom the Gardens of England are indebted for the introduction of this curious species. In its natural position it is pendulous; but in our drawing it is represented erect,—the plant in the Garden of the Horticultural Society from which the figure was taken, having at that time been tied to a stake. It flowers at uncertain seasons, and grows more freely than other plants with a similar habit.

In appearance it is very like the Herba supplex quinta of Rumphius, vol. 6. p. 111. t. 51. f. 2; but that plant has spiked flowers, and, Dr. Wallich informs us, is quoted by Roxburgh in his MSS. to his Dendrobium acinaciforme.

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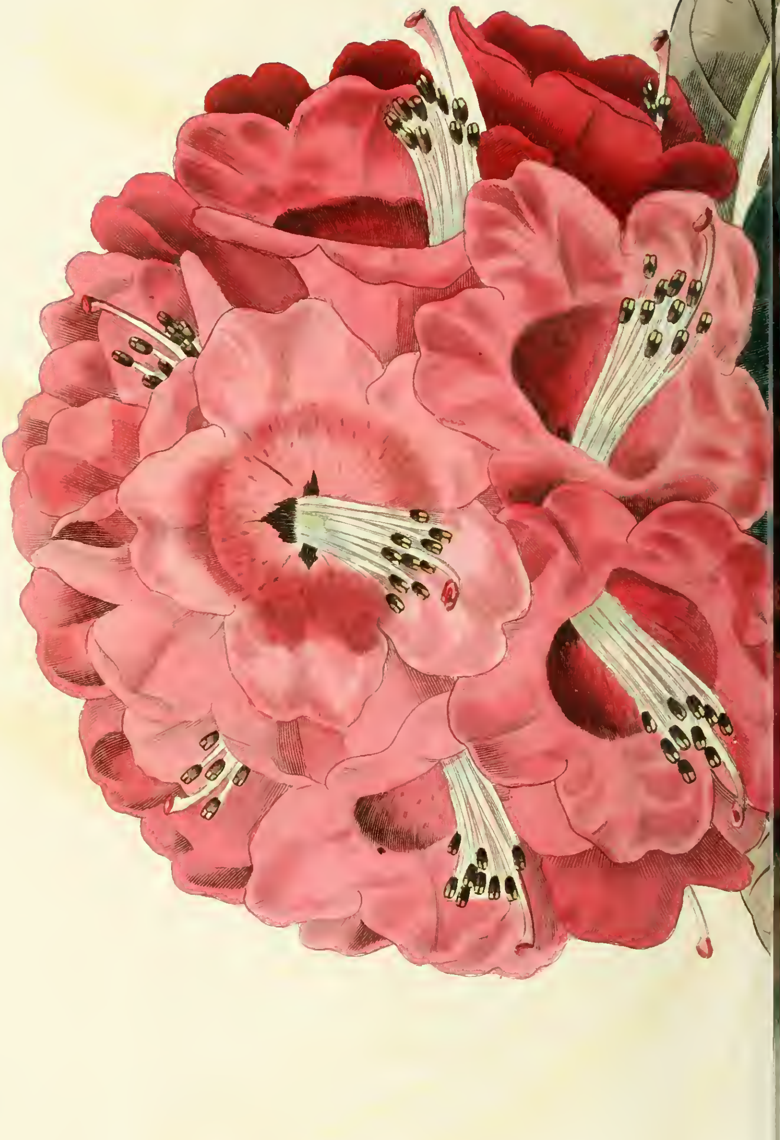
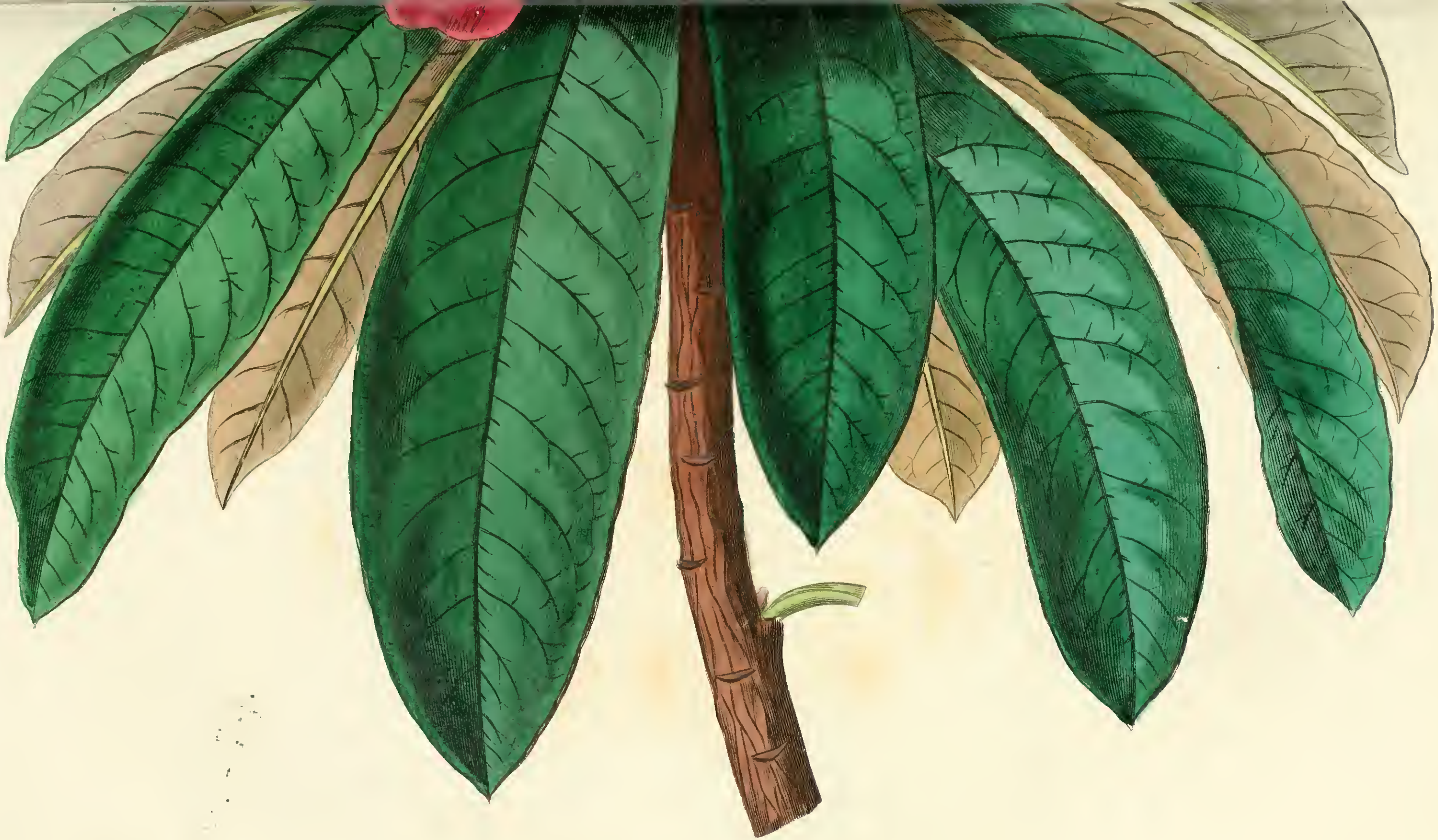
* From δένδρον, a tree, and βίος, life. All the genuine species are found upon trees, in the hot parts of the East Indies.

Stems numerous, compressed, fleshy, pendulous. *Leaves* distichous, fleshy, compressed, ovate-oblong, acute, pale green. *Flowers* solitary, herbaceous. *Sepals* ovate, erect, acute; the inner ones smallest, the lower ones connate with the long base of the column. *Lip* unguiculate, with neither callosities nor appendages, articulated, cuneate, emarginate, crenulate, a little coloured. *Stigma* with two callosities within its cavity. *Pollen masses* 4, twin, loose, collateral. *Anther* with a little stalk.

J. L.





[illegible]

Watts sc.

1240

RHODODENDRON* arboreum; *var.* roseum.

Rose-coloured Tree Rhododendron.

◆

DECANDRIA *MONOGYNIA.*

Nat. ord. ERICEÆ.
RHODODENDRON.— Suprà, vol. 1. *fol.* 37.

R. *arboreum;* foliis glabris lanceolatis subtùs micantibus, capsula valvulis 10, caule arboreo.
R. arboreum. *Smith exot. bot. t.* 9. *Suprà, vol.* 11. *fol.* 890.
R. puniceum. *Roxb. hort. beng.* 33.
β. roseum; foliis subtùs ferrugineis, floribus roseis.

In speaking at fol. 890 of the Scarlet Tree Rhododendron, we remarked, that there was in this country a variety with leaves ferruginous beneath; that variety is the subject of the opposite plate. It differs from the true Scarlet Tree Rhododendron, in having bright rose-coloured flowers, and a little brown tomentum on the under side of the leaves, besides which it is rather more hardy.

Upon comparing the specimen with Dr. Wallich's drawings, we find it perfectly identical with the plant as it grows in India; and also that there is another variety, having leaves ferruginous beneath, with white flowers.

Our drawing was made in Mr. Joseph Knight's Nursery, in the King's Road, in February last: the plant was there cultivated in the Conservatory.

Dr. Wallich kindly informs us, that this variety is found no where except upon "the summit of Sheopore, the highest mountain among those which confine the great valley of Nipal on the north, and at an elevation of not less than 10,000 feet," where it grows intermixed with the white variety, which is, however, the less common of the two. In this mountainous region they both attain, along with the scarlet sort, the size of large forest-trees; the latter, however, although it is found growing among them, is more naturally the inhabitant of a zone 5000 feet lower: it is also found all over the mountains of Nipal and Kumoon, and Sirmore; and this may, as Dr. Wallich remarks, account for its being less hardy than the red sort; because the collectors are more apt to gather their seed from the trees low down on the mountains, than from those at a greater elevation.

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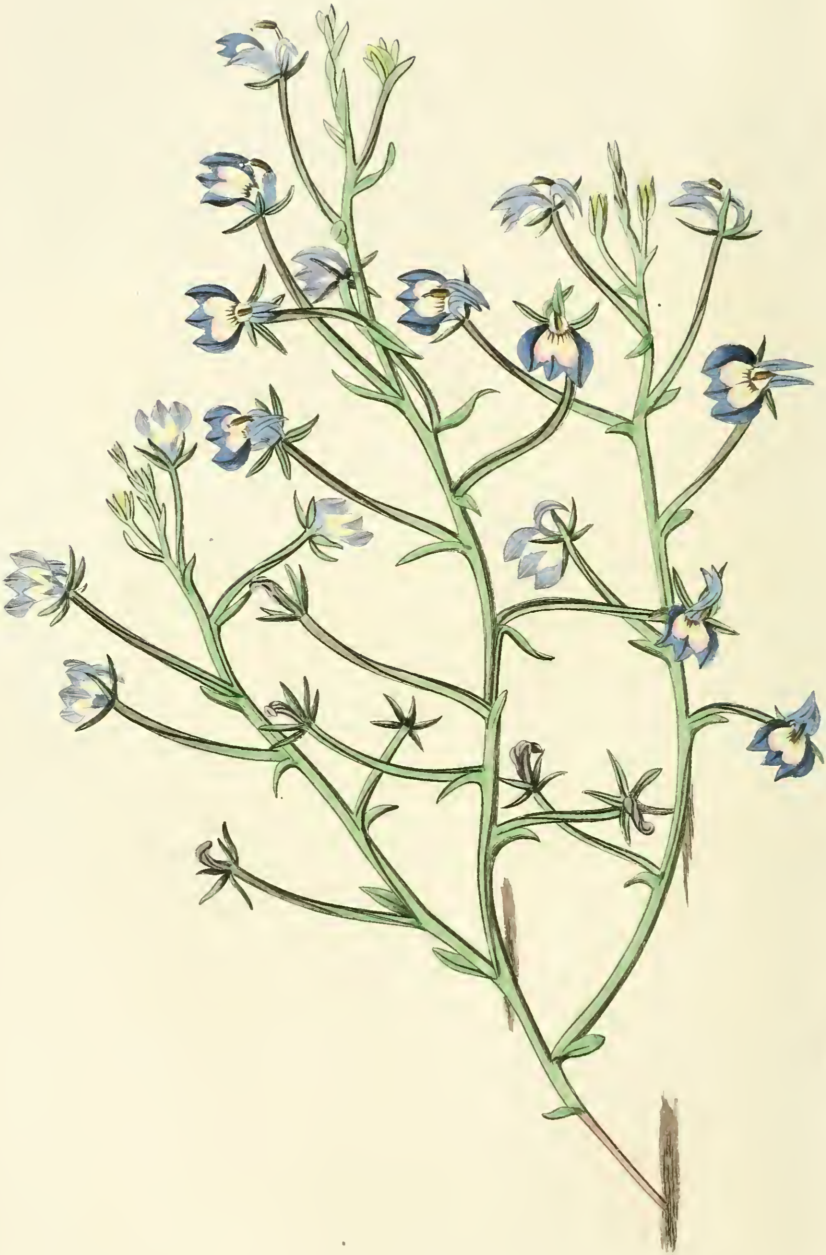
* From ῥόδον, a rose, and δένδρον, a tree; in allusion to the bunches of rose-coloured flowers with which it is covered.

J. L.

1241



CLINTÓNIA* élegans.

Elegant Clintonia.

SYNGENESIA *MONOGAMIA.*

Nat. ord. LOBELIACEÆ *Juss.* *Lindley's synopsis, p.* 137.

CLINTONIA. — *Calyx* superus, pentaphyllus, subæqualis. *Corolla* monopetala, bilabiata, labio inferiore cuneato trilobo, superiore erecto bipartito. *Stamina* in tubo connata, incurva. *Antheræ* connatæ, duabus apice setigeris. *Ovarium* siliquiforme, triangulare, contortum, uniloculare, placentis duabus ! parietalibus. *Capsula* arida, chartacea, polysperma, in valvulis tribus loriformibus dehiscens.——Herba *annua, procumbens, microphylla.* Flores *solitarii, axillares.*

Clintonia elegans. *Douglas.*

Herba *annua, procumbens, parùm ramosa, glabra.* Caulis *teres, angulatus.* Folia *sessilia, ovata, trivenia.* Flores *solitarii, axillares.* Ovarium *sessile, longè acuminatum, foliis 4-5-plò longius, triangulare, contortum.* Corolla *cærulea, labio inferiore medio maculâ albâ.* Antheræ *cæruleæ.* Stigma *conicum, barbâ papillosâ circumdatum.* Capsulæ *foliis multoties longiores.* Pollen *ovale, medio sulcatum.*

Mr. Douglas informs us, that this is very common in low, grassy, over-flowed grounds on the plains of the Columbia, near Wallawallah river, and near the head springs of the Multnomah, flowering from June till August. With us it forms one of the most beautiful annuals with which we are acquainted: notwithstanding the want of spreading foliage to give its flowers effect, the latter are of so brilliant a colour, that the plants, when grown in broad patches, resemble a carpet of silver and blue.

It is propagated by seeds, which are produced in small

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* In memory of his Excellency De Witt Clinton, late Governor of the State of New York, — an amiable, excellent man, and a distinguished patron of American investigation. He was the author of several ingenious treatises in different branches of Natural History; and may be truly said to have deserved well of science, both in his own country and in all the world.

quantities. Our drawing was made in August 1828, in the Horticultural Society's Garden, where it had been raised from Mr. Douglas's seeds.

This genus is highly interesting in several points of view.

In the first place, it exhibits a second instance of unilocular fruit with parietal placentæ, in an order with multilocular fruit and axile placentæ; but the fruit is constructed upon a very different plan from that of Lysipomia, to which it is in this point of view to be compared: while Lysipomia exhibits a placenta apparently parietal, in consequence of the abortion of two cells of a trilocular ovarium, Clintonia has its placentæ absolutely parietal, without any abortion of the same nature.

In the second place, it is an instance, and a very uncommon one, of the abortion of one of the placentas of an ovarium made up of three carpella, having a triangular figure, and finally bursting into three valves.

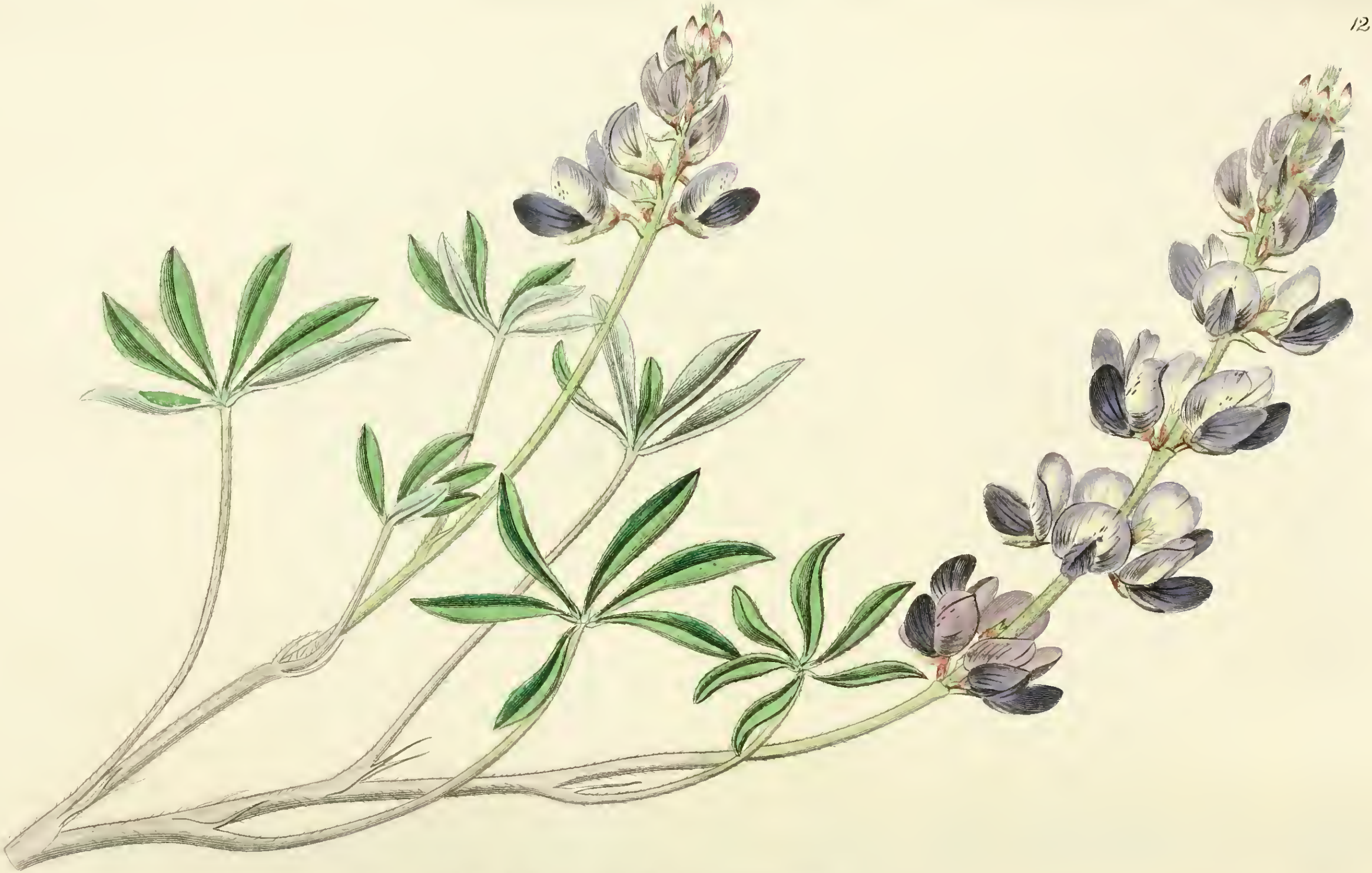
Thirdly, this deviation from the normal structure of the order is unaccompanied by any corresponding irregularity in the other parts of the fructification.

A procumbent *annual*, but little branched, and destitute of hairs. *Stem* terete, angular. *Leaves* sessile, ovate, with three principal veins. *Flowers* solitary, axillary. *Ovarium* sessile, tapering to a point, four or five times as long as the leaves, triangular, twisted. *Corolla* blue, the lower lip with a clear white spot. *Anthers* blue. *Stigma* conical, surrounded by a papillose beard. *Capsule* much longer than the leaves. *Pollen* oval, with a furrow in the middle.

When the seed-vessels are quite ripe they split into three strap-shaped valves, which cohere by either extremity. The seeds are minute, brown, smooth.

J. L.

1242



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LUPÍNUS* áridus.

Arid Lupine.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ.
LUPINUS. — *Suprà, vol.* 13. *fol.* 1096.

L. *aridus;* herbaceus, hirsutissimus, floribus verticillatis pedicellatis bracteolatis, calycis labio superiore bifido: inferiore integro, foliolis 5-9 lineari-lanceolatis villosis, stipulis subulatis. — *Douglas.*

Cæspitosus, palmaris pedalisve, undique pilis longis, rigidis, argenteis, scabrellis vestitus. Folia *albo-villosa, foliolis* 5-9, *lineari-lanceolatis, in desiccato subpungentibus colore in ferrugineo mutante.* Racemus *terminalis, densus, verticillatus, multiflorus;* pedicelli *calyce breviores;* calyx *hirsutus, bracteolis duabus minimis subulatis; labio superiore bifido, inferiore integro falcato.* Flores *cæruleo-purpurei.* Vexillum *rotundatum, atropurpureum;* alæ *falcatæ;* carina *falcata, apice ciliata, pallida, obtusa.* Legumen *rigidum, hirsutum,* 2-3-*spermum.* Semina *parva, longa, alba.*—Douglas.

Mr. Douglas informs us that this beautiful species is an inhabitant only of woodless, scorched grounds, where, from its compact habit, it forms thick carpets of purplish blue, giving a relief to the eye from the micaceous sand in which it delights to grow. It occupies the same range of country as L. leucophyllus, and is equally common with that species.

The spontaneous plant is white, with long hairs, and is a true perennial; but the Garden plant, which is much less hairy, can scarcely be considered more than biennial: from the profusion of the flowers, the plant soon becomes exhausted; and this, together with its impatience of moisture, and the humidity of our climate, is apt to destroy it.

Mr. Douglas sent it to the Horticultural Society in

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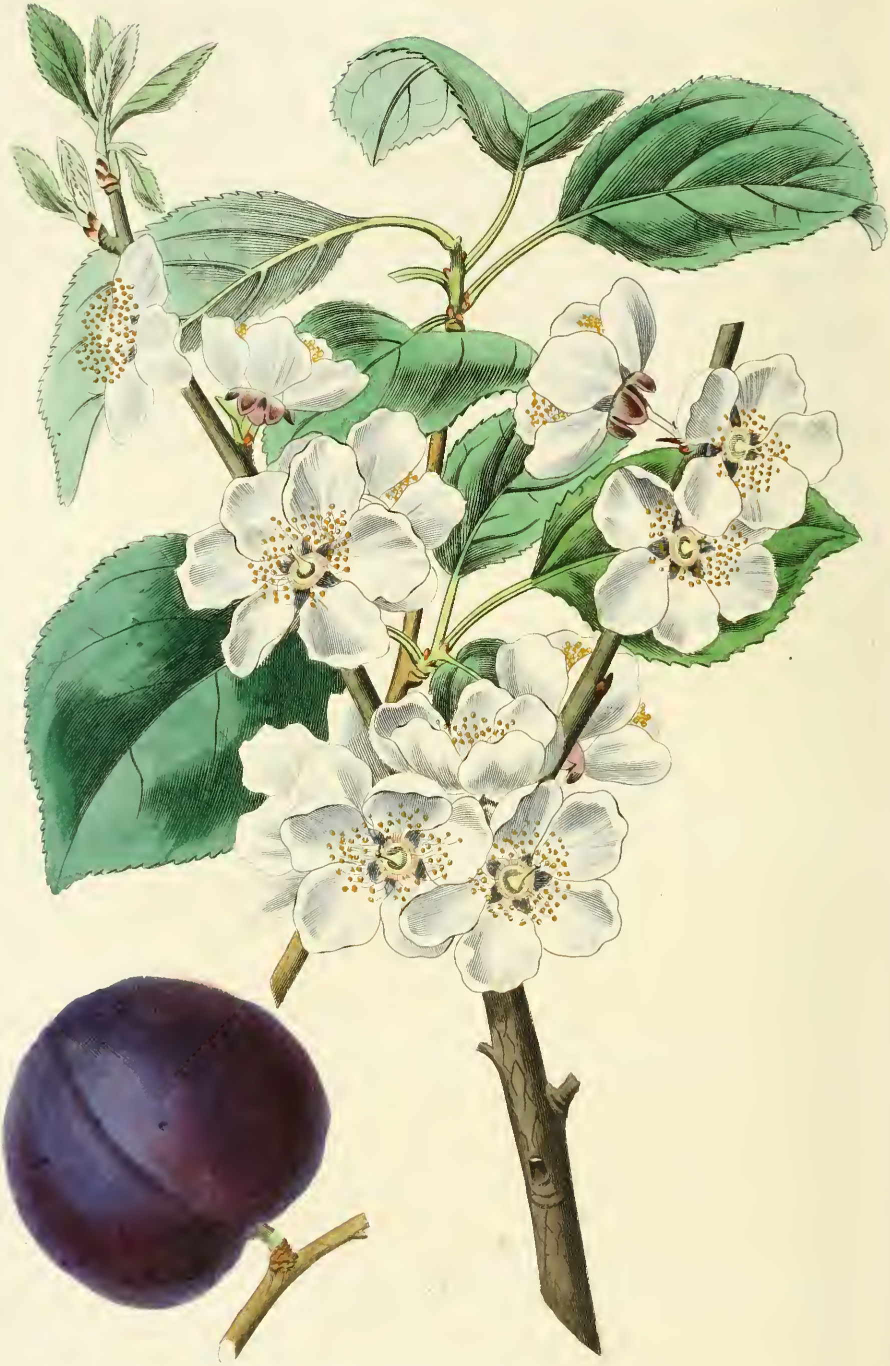
* See fol. 1198.

1827, and it flowered in 1828. Our drawing was made in the Chiswick Garden, in the autumn of that year.

" *Cespitose,* 6 to 10 inches high, densely clothed with rigid, long, silvery, scabrous, or slightly barbed hairs. *Leaves* covered with short and less copious hairs than the stem. *Leaflets* 5-9, linear-lanceolate, equally hairy with the stem, almost pungent in a dry state, and rusty brown colour. *Raceme* terminal, dense, whorled, many-flowered. *Pedicels* shorter than the calyx. *Calyx* hirsute, with two minute, subulate bracteolæ; the upper lip bifid, the lower entire, and falcate. *Flower* purple-blue. *Vexillum* rounded, dark purple. *Wing* falcate, purple-blue; *keel* falcate, ciliated at the apex, obtuse, pallid. *Pod* rigidly hirsute, 2-3-seeded. *Seeds* small, long, white."—*Douglas.*

J. L.

1243.



Hart del. [illegible] J. Watts.

1243

PRÚNUS* dasycárpa.

Purple-fruited Apricot.

ICOSANDRIA *MONOGYNIA.*

Nat. ord. ROSACEÆ. § *Drupaceæ.*
PRUNUS.— *Suprà, vol.* 2. *fol.* 136.

P. *dasycarpa;* foliis ovatis acuminatis obtusis serratis, subrugosis, petiolis glandulosis, corollis subhexapetalis.
P. dasycarpa. *Ehr. beitr.* 6. 90. *Willd. arb.* 243. *Sp. pl.* 2. 990.
P. Armeniaca nigra. *Desf. cat. ed.* 3. *p.* 297.
Armeniaca atropurpurea. *Loisel in Duhamel's ed. nov.* 5. *p.* 172. *t.* 51. *f.* 1.
Armeniaca dasycarpa. *Dec. prodr.* 2. 532.

Arbor *mediocris, ramis glabris, ferè* P. Armeniacæ, *sed magis virgatis.* Folia *petiolata, ovalia, v. ovato-acuminata, obtusa, subrugosa, petiolis glandulosis.* Flores *fasciculati, breviter pedunculati; calyce corollâque sæpè 6-partitis.* Fructus *pruni domesticæ magnitudine, atropurpurei, carne fulvo, austero.*

This is the plant commonly known in the Nurseries as the *Black Apricot.* As a fruit it is of no kind of value; but as a handsome hardy tree it deserves cultivation. It is treated in all respects as a common Apricot, and flowers about the same period of the year. Its native country is unknown.

We certainly are not among those who attach much importance to what are called intermediate forms in nature, in determining the limits either of genera or species; but we do think that it is impossible to maintain the genus Armeniaca, which does not possess a single character, deserving that name, to distinguish it from Prunus, and which is completely identified with the latter by means of the species now described and the Prunus Brigantiaca of Villars. Cerasus, which differs from Prunus in the vernation of its leaves, will on that account be adopted by Botanists.

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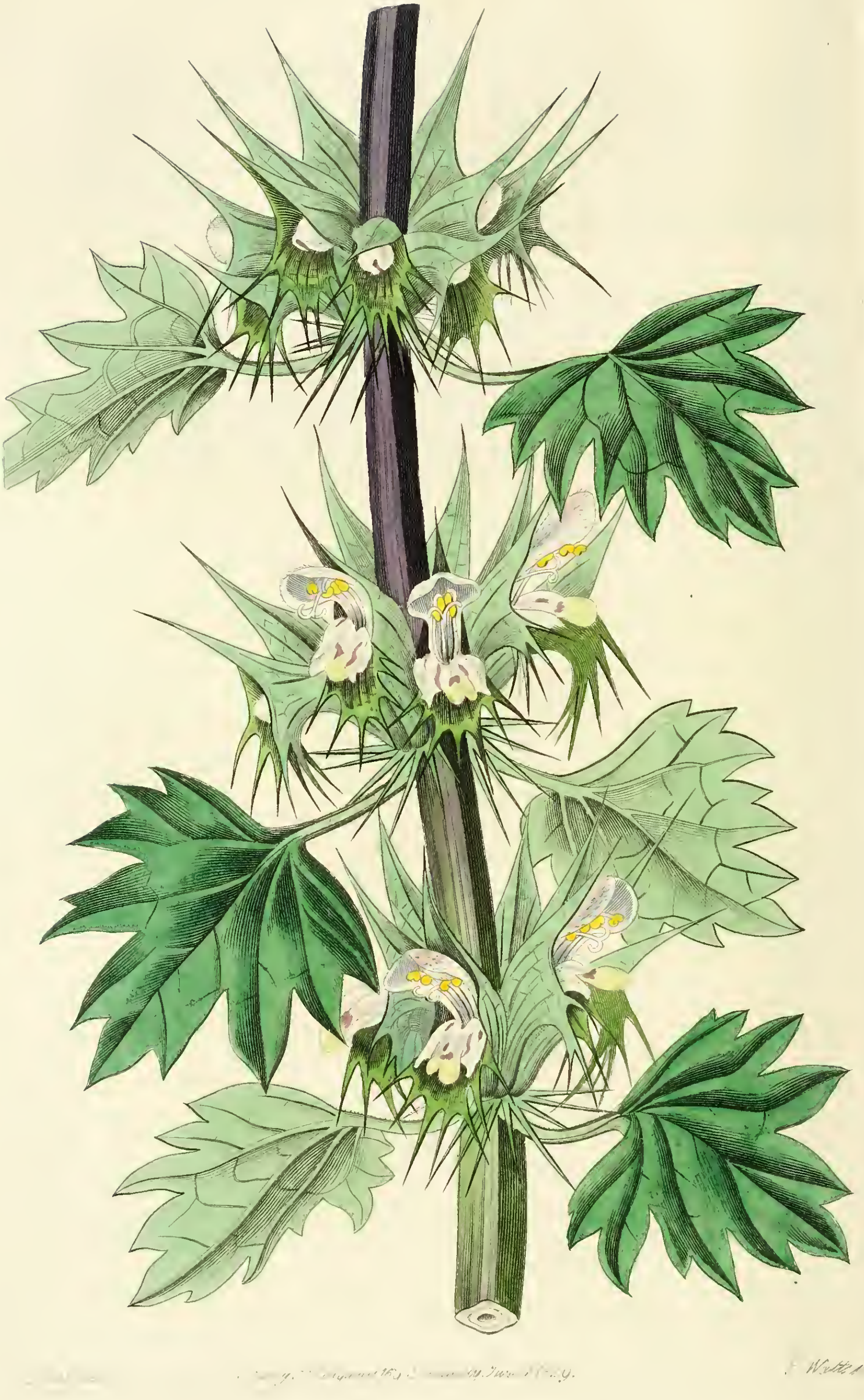
* Προύνη is the Greek name of the plum: its origin is unknown. Dasycarpa literally signifies thick-fruited.

Our drawing was made in the Garden of the Horticultural Society.

A middle-sized tree, with smooth branches, almost like those of the common Apricot, but more slender. *Leaves* stalked, oval, or ovate-acuminate, obtuse, somewhat rugose, with glandular petioles. *Flowers* fascicled, on short stalks; *calyx* and *corolla* often in 6 parts. *Fruit* about as large as a common plum, dark purple, with a tawny, austere flesh.

J. L.



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1244

CHASMÓNIA* incísa.

Cut-leaved Chasmonia.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. LABIATÆ.

CHASMONIA.—*Calyx* sulcatus, bilabiatus, labio superiore integro, inferiore rotundato (7-) 6-dentato, dentibus spinosis. *Corolla* ringens, galeâ emarginatâ planâ, labio 4-lobo. *Antheræ* lineari-oblongæ. *Stigmata* æqualia. *Involucrum* 3-partitum, basi calycis affixum, spinosum.—*Presl. Flora Sicula* 1. *p.* xxxvii.

C. *incisa.* Presl. l. c.
Moluccella spinosa. *Linn. sp. pl.* 821. *Willd. sp. pl.* 3. 128. *Spreng. syst.* 2. 745.
Molucca spinosa. *Dodorns. pempt.* 92.
Melissa moluccana fœtida. *Bauh. pin.* 229.

Caulis *quadratus, glaber.* Folia *longè petiolata, inciso-palmata, spinosa, glabra.* Bractea *cuique flori tripartita, laciniis spinosis, subulatis, subpilosis.* Calyces *inflati, rigidi, reticulati, tubo sulcato, basi glanduloso, bilabiati; labio superiore dilatato, erecto, inferiore rotundato, radiatim 7-dentato: dentibus longè spinosis, inæqualibus.* Corolla *ochroleuca, pilosa, calyce brevior, galeâ convexâ, leviter emarginatâ, labio subcuneato, pariter 4-lobo.* Antheræ *glabræ, discretæ.*

The plant from which our drawing of this rare plant was taken, in the Nursery of Messrs. Young, of Epsom, had been raised from seed collected by Mr. Philip Barker Webb. It is a native of Sicily and other parts of the Mediterranean; and is one of the oldest inhabitants of our Gardens, having been introduced, according to the *Hortus Kewensis*, so long since as 1596. It is a hardy annual, flowering in July and August.

Stem square, smooth. *Leaves* on long stalks, cut-

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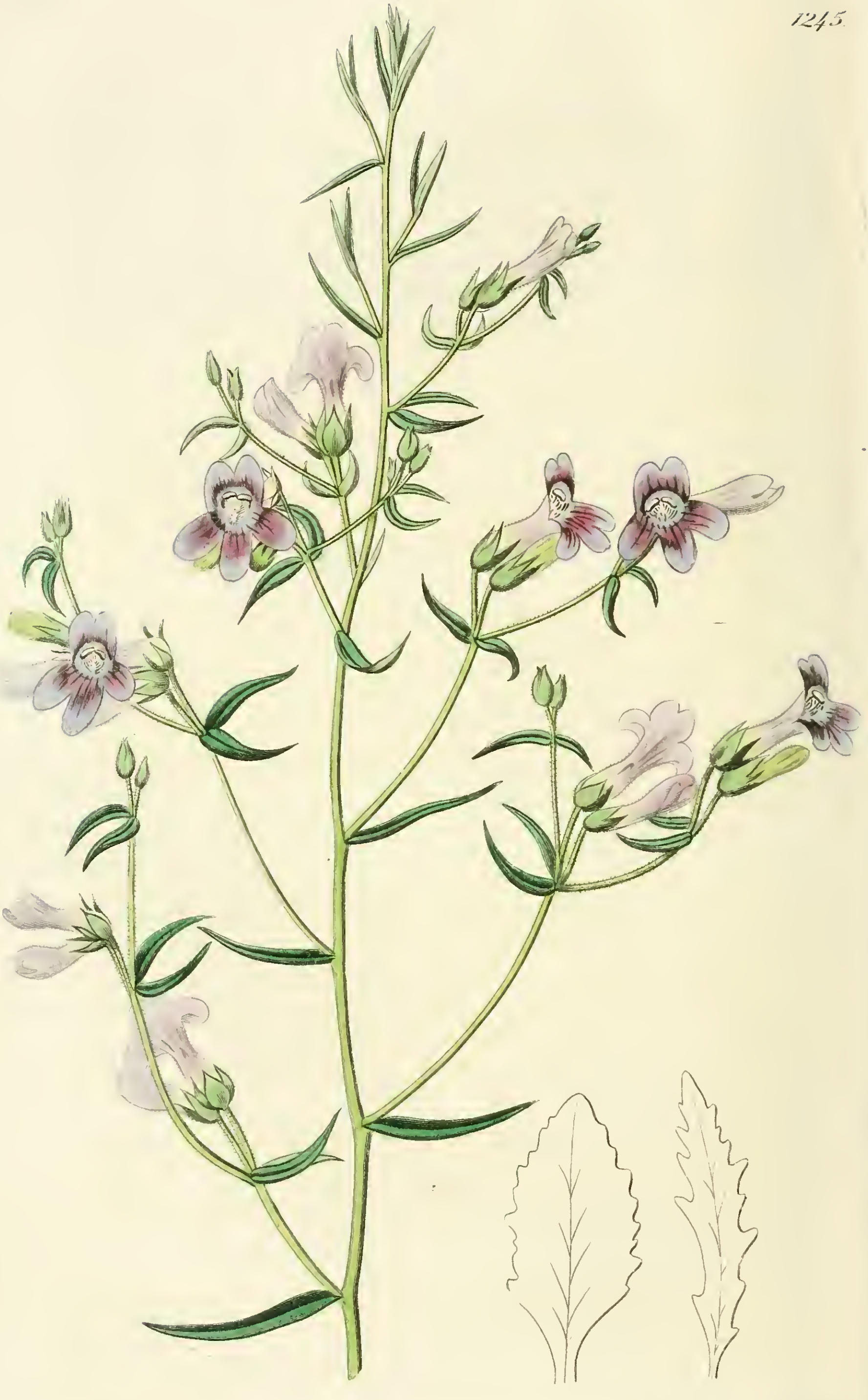
* From χασμάω, to gape wide, in allusion to the yawning mouth of the calyx.

palmate, spiny, smooth. *Bracteæ* of each flower 3-parted, with subulate, spiny, somewhat hairy segments. *Calyxes* inflated, rigid, reticulated, with a furrowed glandular tube, 2-lipped; the upper lip dilated, erect, the lower rounded, with seven long, unequal, radiating spiny teeth. *Corolla* yellowish, pilose, shorter than the calyx; galea convex, slightly emarginate, with a somewhat wedge-shaped, equally 4-lobed lip. *Anthers* smooth, distinct.

J. L.

1245.



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1245

PENTSTÉMON* triphȳ́llum.

Three-leaved Pentstemon.

◆

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ.
PENTSTEMON. — *Suprà, vol.* 13. *fol.* 1121.

P. *triphyllum;* herbaceum, humile, foliis ternis quaternisve glabris incisis: inferioribus oblongis, floralibus integerrimis, pedunculis bi-trifloris calycibusque arachnoideis, corollæ laciniis oblongis obtusis: labii inferioris æqualibus.

P. triphyllum. *Douglas.*

Caulis *teres, ramosus, pedalis sesquipedalisve, coloratus.* Folia 3-4-*natim verticillata, obtusè incisa, inferiora oblonga, superiora lanceolata, suprema (floralia) lineari-lanceolata, integerrima.* Flores *parcè paniculati, pedunculis* 2-3-*floris, arachnoideis.* Calycis *laciniæ ovatæ, acutæ, arachnoideæ.* Corolla *subventricosa, pallidè rosea, venosa, labio superiore emarginato: laciniis obtusis; inferiore trilobo, laciniis oblongis, obtusis, æqualibus.* Filamenta *superiora basi dilatata; rudimentum filiforme, barbatum.* Antheræ *albæ, glabræ.* — Douglas.

According to Mr. Douglas, by whom this was detected, it is a common plant, on decomposed dry granite, or schist rocks, on the Blue Mountains of North-west America, in the district watered by the river Columbia; it is also found on the mountains to the southward in Northern California. It was introduced by the Horticultural Society in 1827, and flowered in August 1828, when our drawing was made.

The verticillate disposition of the leaves is not represented in our plate, in which the upper part of a very vigorous plant is shewn. They are characteristic of the species; and both in the wild and cultivated plant vary from 3 to 4 in a whorl. It is a perennial, and easily cultivated in common soil.

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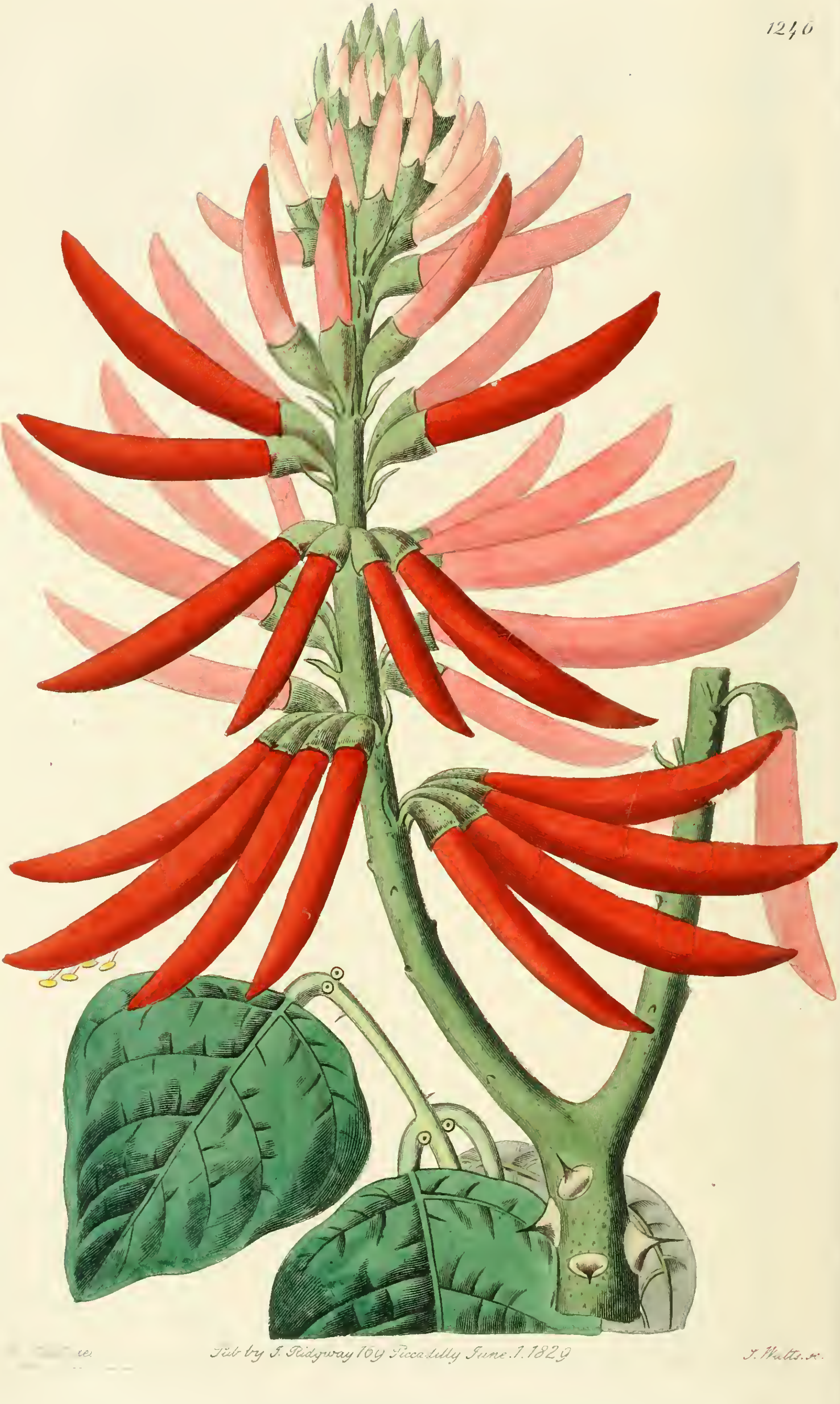
* So called from πέντε, five, and στῆμα, a stamen, in allusion to the presence of a fifth stamen; an unusual occurrence in the order to which this genus belongs.

" *Stem* round, branching, red, smooth, and wiry, a foot to 16 inches high. *Leaves* sessile, linear, acute, widely and unequally dentate, in threes round the stem, the upper or floral ones perfectly entire and glabrous. *Flowers* axillary, panicled, with upright, rarely more than 3-flowered *peduncles*, clothed with very fine, long, white, entangled hairs. *Segments* of the calyx ovate, acute, hairy in the same degree as the peduncles. *Corolla* tubular, somewhat ventricose, pale rose colour, with dark veins, nearly equally 5-cleft. *Upper filaments* dilated at the base. *Anther* smooth, white. *Rudiment* filiform, bearded half way down at the upper side."—*Douglas*.

J. L.

1246



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1246

ERYTHRÍNA* poiā́nthes.

Naked-flowering Erythrina.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ.
ERYTHRINA. — *Suprà, vol.* 4. *fol.* 313.

E. *poianthes;* foliis ternatis, foliolis lateralibus ovatis, intermedio rhombeo-ovato, omnibus subtùs pubescentibus, rachi petioloque communi aculeatis, caule arboreo aculeato, calyce obliquè truncato, latere superiore v. fisso v. integro, staminibus diadelphis vexillo vix brevioribus. — *Brotero in Linn. trans.* 14. *p.* 342. *tt.* 10 *et* 11.

This fine plant was sent, in 1827, from the Royal Gardens at Ajuda to Mr. Lambert, through the intervention of Lord Heytesbury, at that time Ambassador at the Court of Portugal. It is cultivated in the stove, where it produces its flowers without the leaves. Our drawing was made from a specimen in Mr. Lambert's possession, in August 1828.

According to Professor Brotero, this is 10 or 15 feet high, growing in the Botanic Garden of Ajuda, and elsewhere in Portugal; and flowering in January, February, and March. Its native country is unknown: it is conjectured by Brotero that it may be a native of Asia.

To the very prolix description given by this Botanist in the *Transactions of the Linnean Society*, we find nothing to add. He observes, that it must not be confounded with either E. corallodendron, indica, or picta, to all which it is related, but from which it differs in having the stamens truly diadelphous. J. L.

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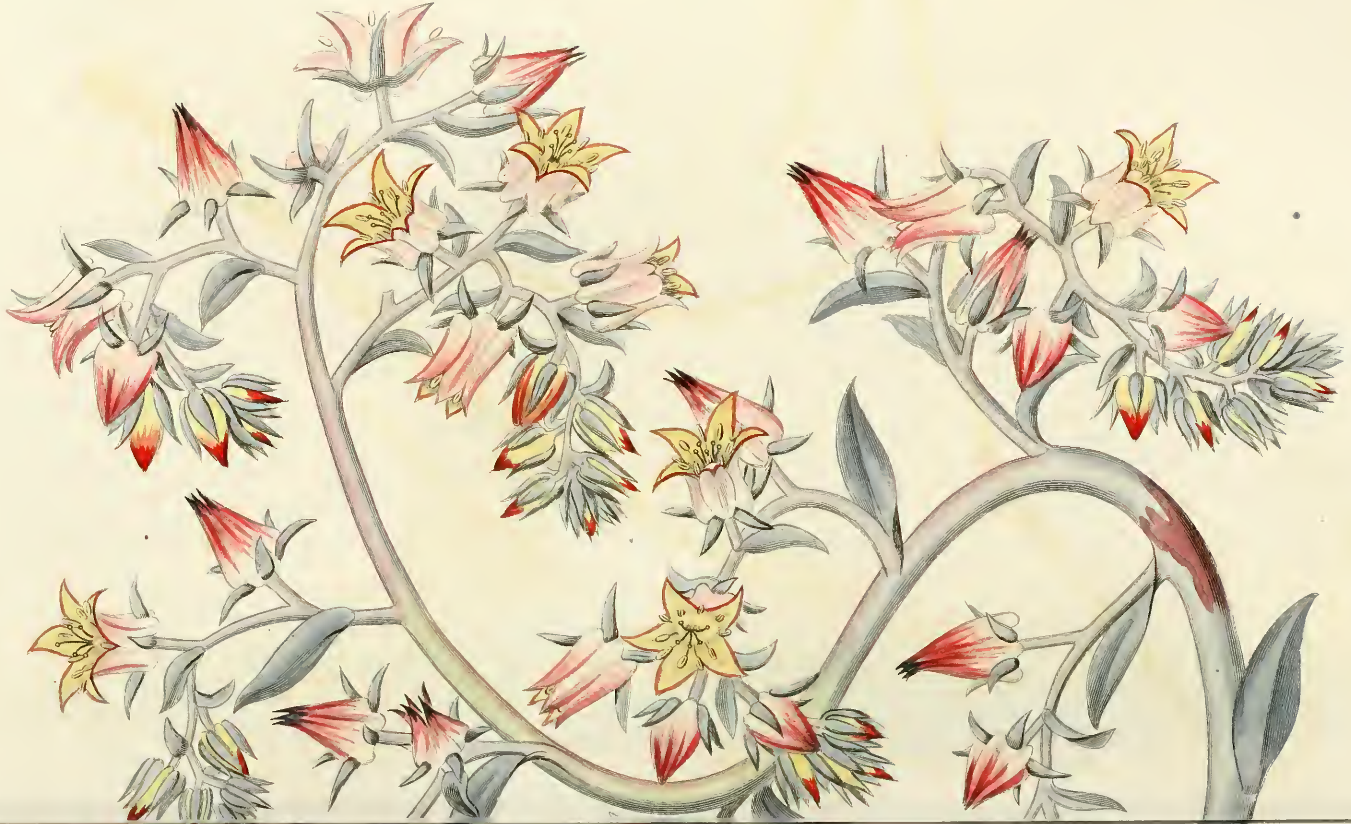
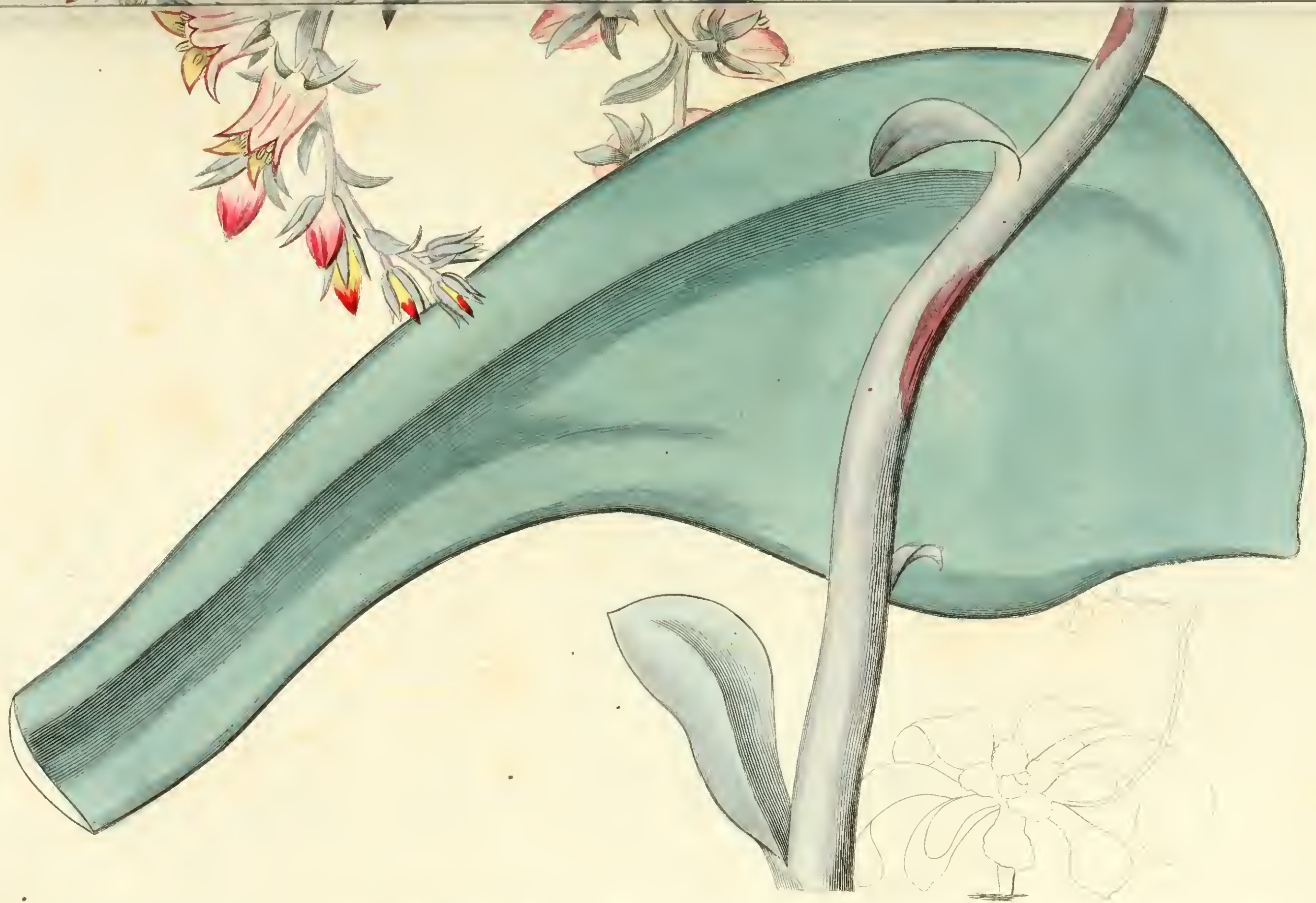
* So called from ἐρυθρὸς, red, in allusion to the usual colour of the flowers. What is meant by poianthes, we hardly know; unless the word is formed from ποιητὸς, adventitious, in obscure allusion to the flowers appearing without the leaves.





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Pub by J. Ridgway 169 Piccadilly Feby 1 1829.

ECHEVÉRIA* gibbiflóra.

Gibbous-flowered Echeveria.

DECANDRIA *PENTAGYNIA.*

Nat. ord. CRASSULACEÆ.

ECHEVERIA. — *Calyx* 5-partitus, sepalis folia referentibus erectis, imâ basi subconcretis. *Petala* 5, infernè coalita, erecta, crassa, rigidula ad nervum medium crassiora et ferè basi trigona, acuta. *Stamina* 10, petalis breviora, basi cum petalis concreta. *Squamæ* 5, breves, obtusæ. *Carpella* 5, in stylos subulatos abeuntia.——*Frutices carnosi* Mexicani. Folia *alterna, caulina, aut rosulata, subopposita, integerrima, enervia.* Flores *secùs rachin, aut secùs cymæ ramos sessiles, coccinei aut flavi.*—Dec. prodr. 3. 401.

E. *gibbiflora;* foliis planis cuneiformibus acutè mucronatis ad apices ramorum confertis, paniculâ patente, floribus secùs ramos breviter pedicellatis.—*Dec. prodr.* 3. 401. *Mémoire sur les Crassulacées, p.* 29. *t.* 5.

Frutex *carnosus, floridus,* 2-3-*pedalis, foliis ad apicem caulis brevis rosulatis, carnosis, glaucis.* Racemus *compositus, flexuosus, bracteis inferioribus majoribus, foliaceis.* Petala *aurantiaca, basi inter sepala producta pallidiora.*

A very handsome succulent plant, belonging to a small tribe peculiar to the Flora of tropical America. It lives readily in the Greenhouse, where it flowers in November and December.

Our drawing was made in 1828, in the Garden of the Horticultural Society, where it had been raised from seeds collected on the western coast of South America by Mr. James M'Rae.

M. Decandolle says it is a native of Mexico.

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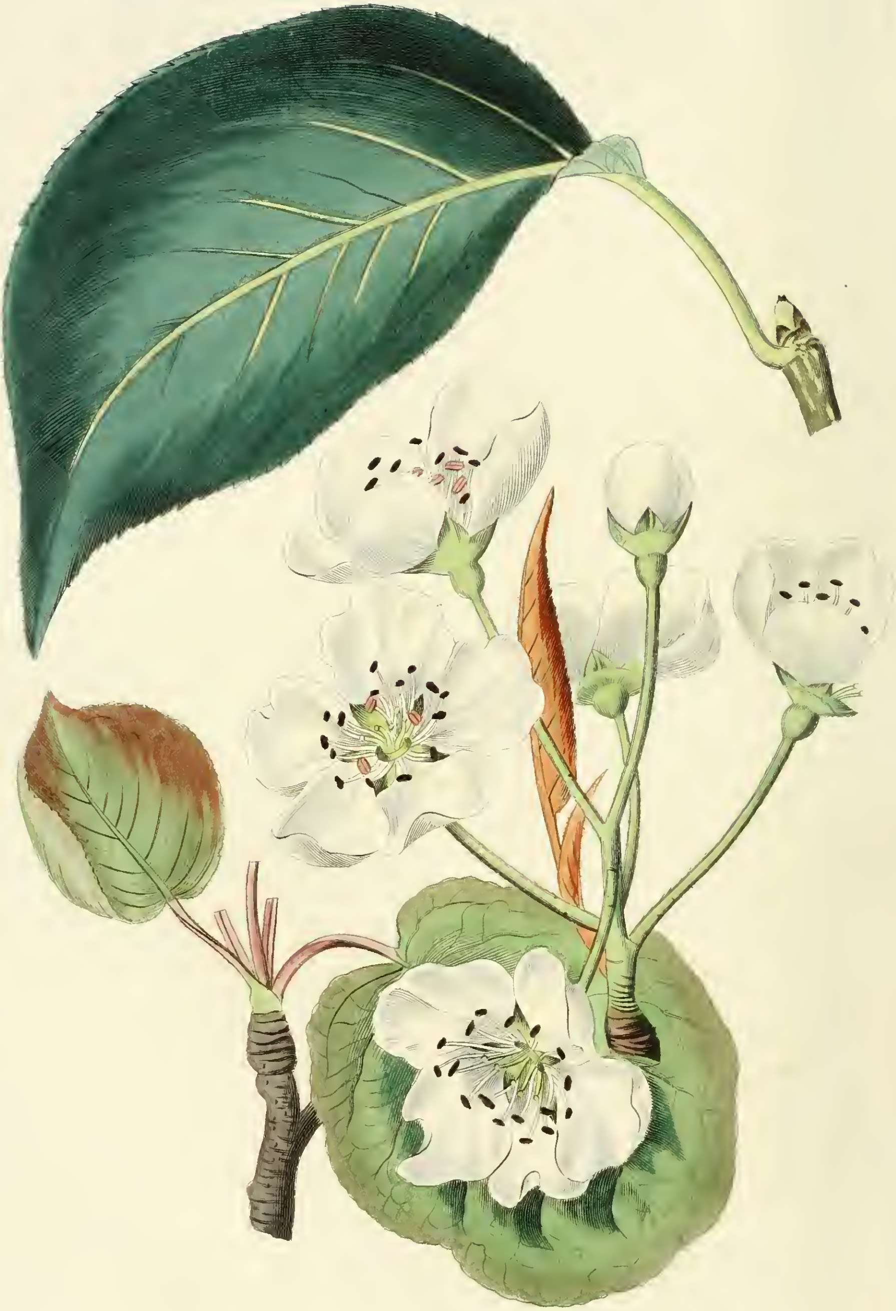
* Named in honour of M. Echeveria, a skilful Botanical painter, who executed many of the finest designs of the Mexican Flora, commenced under the direction of MM. Sessé, Mociño, and Cervantez.

A fleshy shrub, when in flower 2 or 3 feet high. *Leaves* rosulate at the top of a short stem, fleshy, glaucous. *Raceme* flexuose, compound, with large foliaceous bracteæ. *Petals* orange-coloured, their bases elongated beyond the sinuses of the calyx, paler than the rest.

J. L.

1248



PÝRUS* sinénsis.

The Chinese Pear.

◆

ICOSANDRIA *PENTAGYNIA.*

Nat. ord. Pomaceæ. *Juss. Lindley's synops.* 103.
PYRUS.— *Suprà, vol.* 6. *fol.* 514.

P. *chinensis;* foliis cordatis apiculatis lucidis serratis: junioribus subtùs pubescentibus, pedunculis corymbosis, calycibus intùs glabris, fructu verrucoso osseo.
Ri vulgò *Nas.* Pyrus sativa fructu magno duro. *Kæmpf. amœn.* 800.
Pyrus communis. *Lour. fl. Cochin Ch. p.* 321.
Pyrus sinensis. *Lindley in hort. trans.* 6. 396. *Hort. soc. fruit catalogue, p.* 154.

Arbor Pyri communis similis; differt tamen ramis *validioribus pallidè viridibus demùm fusco-viridibus,* foliis *majoribus lucidis ferè sempervirentibus,* fructibus *austeris pomiformibus verrucosis osseis,* calyce *demùm intùs semper glabro nec lanuginoso.*

This, the Chinese Pear, Sandy Pear, or Snow Pear, as it is indiscriminately called, is a species at present very little known in Europe. It is a native of China, whence it was originally introduced by the Horticultural Society in the year 1820, on board the Cornwall, Captain John Peter Wilson.

It differs from the European Pear in having longer and greener branches; larger, more lucid, and almost evergreen leaves; insipid, apple-shaped, warted, very gritty fruit; and a calyx, the inside of which is destitute of the down that is found in all the varieties of the European Pear.

The Chinese call it the Sandy Pear, in consequence of the grittiness of its fruit, which is occasionally ripened in this country. As a fruit-tree it has no merit whatever; on the contrary, it is, as far as has yet been seen, perfectly worthless; but for an ornament of the Park or the Shrubbery it deserves notice, being perfectly hardy.

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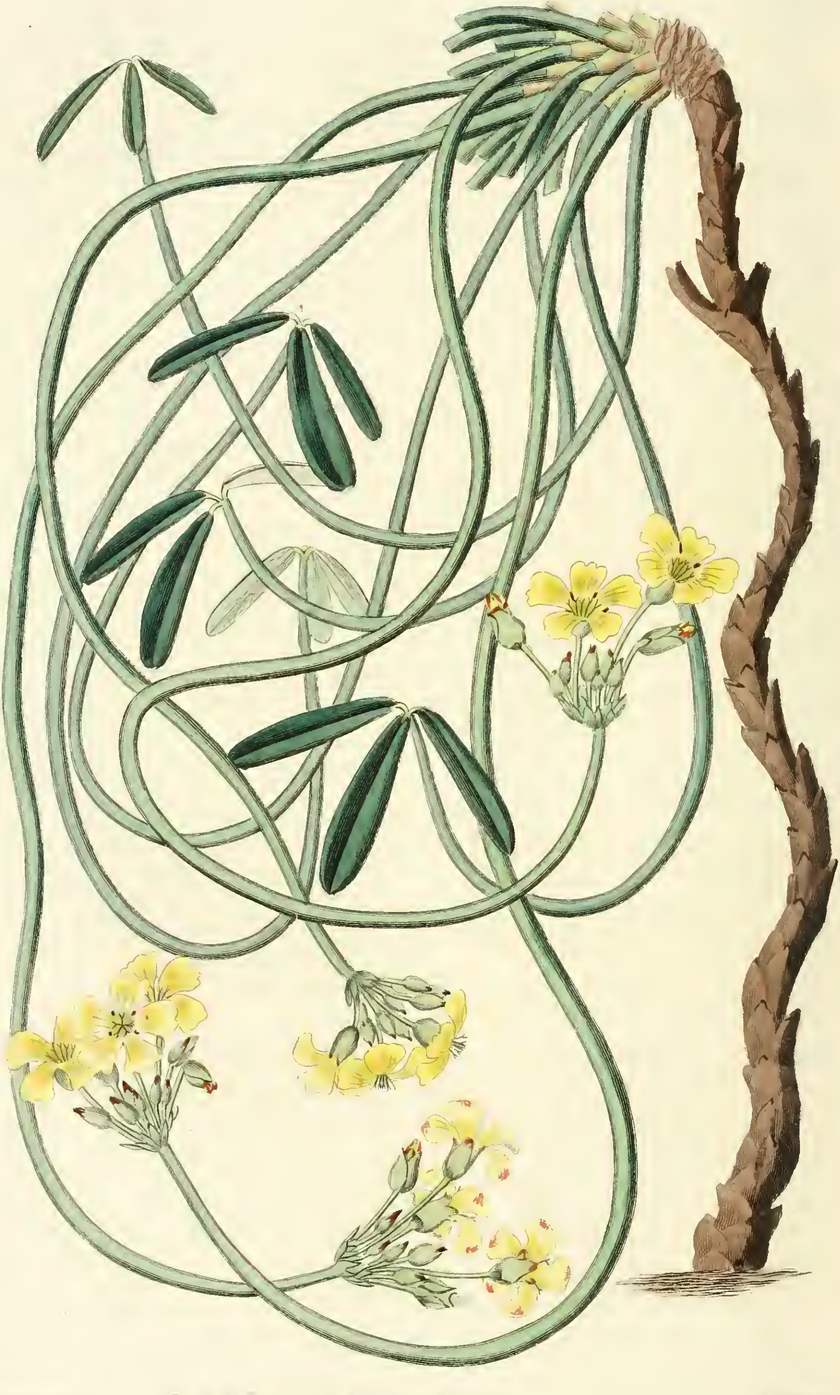
* See fol. 1196.

Our drawing was made in the Garden of the Horticultural Society in April 1828.

J. L.

1249



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OXÁLIS* tortuósa.

Tortuous Oxalis.

◆

DECANDRIA *PENTAGYNIA.*

Nat. ord. Oxalideæ.
OXALIS. — *Suprà, vol.* 2. *fol.* 117.

Div. Caprinæ. *Acaules aut stipite nudo apice tantùm folioso donatæ, pedunculis uni- bi- aut sæpiùs multifloris, foliis radicalibus petiolatis plurifoliolatis, sæpiùs trifoliolatis.*—Dec. prodr. 1. 695.

O. *tortuosa;* caule carnoso squamoso, foliolis 3 linearibus obtusis subtùs pilosis, floribus umbellatis, pedunculo petiolisque tortuosis subæqualibus carnosis.

Caulis *tortuosus, carnosus, squamosus, palmaris et ultrà, in apice foliosus.* Petioli *atrovirides, filiformes, carnosi;* foliola *parva, linearia, carnosa, subobtusa, subtùs pilosa.* Pedunculi *petiolis similes, sed paulò longiores.* Umbelli *multiflori.* Sepala *triangularia v. rhomboidea, obtusa, paulò erosa, margine anteriore colorato.* Petala *lutea, cuneata, sanguineo magis minusve marginata.* Stamina *stylis subæqualia.* Ovaria *polysperma.*

A native of Chile, where it was found growing very sparingly in the neighbourhood of Valparaiso, by Mr. James M'Rae, in October 1825.

Our drawing was made in the Garden of the Horticultural Society in June 1828. The plant is kept in the Greenhouse, where it grows with a tortuous scaly stem to the height of a foot or thereabouts.

The *O. carnosa* figured at fol. 1063 of this work has, since it was published, ceased to produce its blossoms singly, or in pairs; but now developes them in many-flowered umbels. It would therefore be more properly

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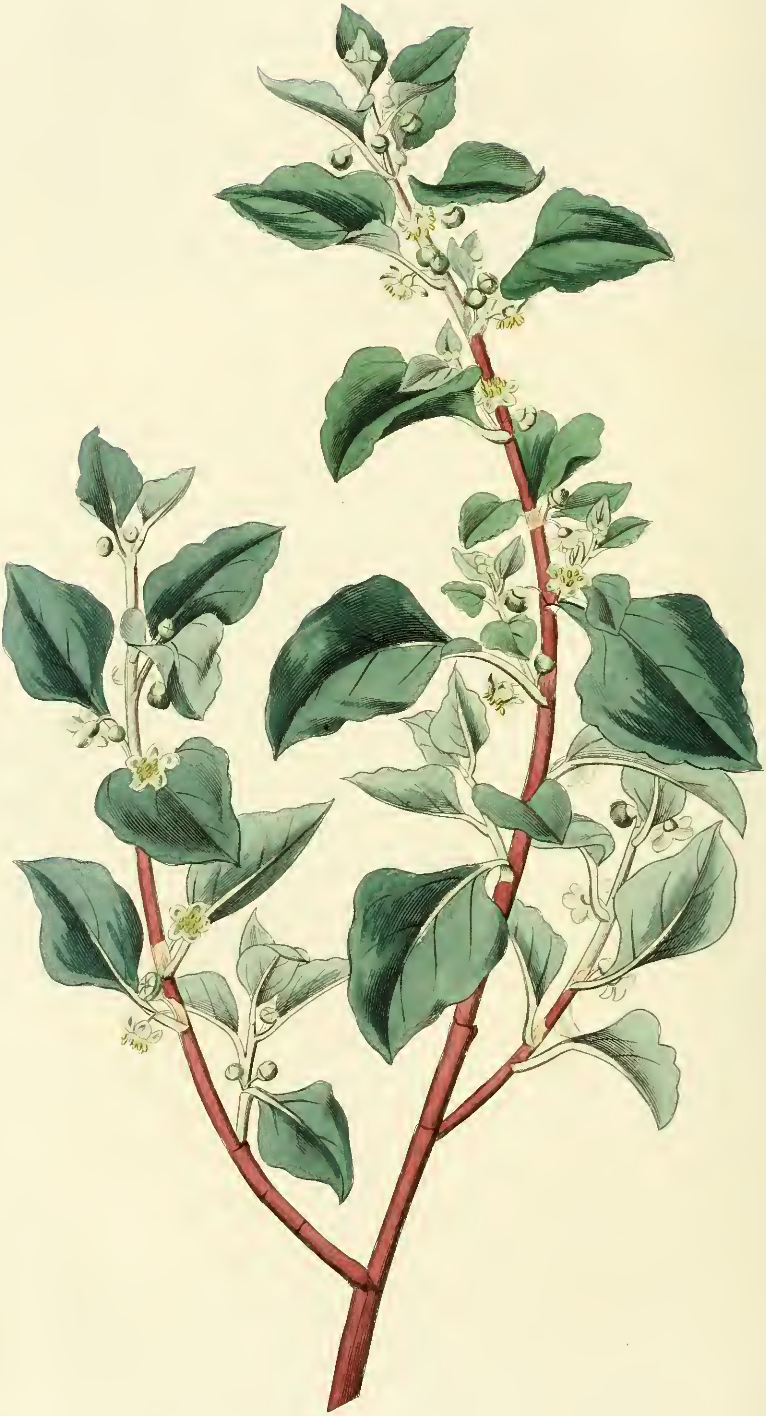
[*] 'Οξαλὶς is the Greek name for sorrel, so called on account of the acidity of the leaves. This genus is also acid, in as great a degree as sorrel, for which it is actually substituted in the countries where it grows.

referred to the Caprina section of the genus, along with the present species.

Petioles dark green, filiform, fleshy; *leaflets* small, linear, fleshy, somewhat blunt, hairy beneath. *Peduncles* like the petioles, but something longer. *Umbels* many-flowered. *Sepals* triangular or rhomboidal, obtuse, somewhat eroded, with their anterior margin coloured. *Petals* yellow, cuneate, more or less bordered with red. *Stamens* nearly equal to the styles. *Ovaria* many-seeded.

J. L.

1250.



Pub. by J. Ridgway 169 Piccadilly Jan. 1829

POLÝGONUM* injucúndum.

Unattractive Polygonum.

◆

OCTANDRIA *TRIGYNIA.*

Nat. ord. POLYGONEÆ.
POLYGONUM. — *Suprà, vol.* 13. *fol.* 1065.

P. *injucundum;* foliis triangularibus in petiolo attenuatis acutis, ochreis cylindricis truncatis glabris, racemis axillaribus foliis brevioribus, floribus octandris digynis, caule fruticoso.

Caulis *fruticosus, pedalis bipedalisve, teres, purpureus, parùm ramosus.* Folia *triangularia, glabra, in petiolo attenuata, venis inconspicuis.* Ochreæ *membranaceæ, cylindricæ, truncatæ, petiolo breviores.* Racemi *axillares, erecti, foliis breviores;* bracteæ *membranaceæ, ovatæ.* Perianthium 5-*fidum, æqualiter patens, herbaceum, tubo obconico, subcarnoso.* Stamina 8, *in disco connata.* Ovarium *subrotundum, digynum.*

This rare, though not very interesting, plant is a native of the high parts of the Cordilleras lying between Valparaiso and Santiago, where it was collected for the Horticultural Society by Mr. James M'Rae. Our drawing was made in the month of May 1828, from a plant growing in the Chiswick Garden, where it is cultivated in the frames.

That the genus now called Polygonum comprehends several groups of plants requiring to be separated as distinct genera, is, we think, quite apparent from the very excellent Monograph of Dr. Meisner, to whom the honour is due of having been the first to investigate scientifically the structure and modifications of these plants. But the fruit of this species being unknown, it is not at present possible to refer it accurately to its station. In habit it has most affinity with the Fagopyrum tribe; but its ochreæ are cylindrical and truncated, not semi-cylindrical. Perhaps this, and the Coccoloba sagittifolia of Ortega, are the representatives of a new form of the order peculiar to South America.

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* So called on account of the numerous geniculations of the stems of some of the species (πολύς, many, and γόνυ, a knee), according to De Théis and others: but this derivation is perhaps applicable to the herb πολυγόνατον of the Greeks, which is supposed to have been the Convallaria latifolia of modern Botanists, rather than to the subject of the present article. The πολύγονον of the Greeks, under which were comprehended several species of the genus Polygonum, is said by the lexicographers to be derived from πολύγονος, fruitful, productive; and Scribonius Largus expressly declares that "herba, quæ, quia multa est, et ubique nascitur, πολύγονον appellatur."

The various species of Polygonum are better known as troublesome or uninteresting weeds, than as useful or ornamental plants. We must not, however, be led to despise the meanest herb that grows, because its value is unknown to us: in proof of which, read the following extract from Dr. Meisner's Monograph: —

Of all the species, the most useful are P. *fagopyrum* and *tataricum*, the grain of which supplies, in many parts of the old world, the place of corn: they have in some places acquired the name of Saracen wheat, in consequence of supplying the only kind of corn used by some of the wandering tribes of Asia: to people of this description, the Fagopyrums are of the utmost value, as they grow readily in any soil, and ripen their produce in a very short space of time. The culture of the common species is not, however, confined to Asia; it is well known in almost every part of Europe; and in Nipal it is grown along with P. *tataricum* and *emarginatum*. In Russia and Siberia the two first of these species are used; but in Europe the P. *fagopyrum* is preferred: nevertheless, according to M. Decandolle, the farmers of Piedmont, especially in the valley of Lucerne, chiefly employ the P. *tataricum*, because it ripens more quickly, and is therefore less likely to suffer from cold summers, or from being sown on the sides of the mountains. The Piedmontese distinguish the P. *fagopyrum* by the name of " Formentine de Savoie," and the P. *tataricum* by that of " granette" and " Formentine de Luzerne." The principal objection to the latter is, that its flowers expand irregularly and unequally, and that the flour is blackish and rather bitter. The P. *fagopyrum* is, however, cultivated in the richer parts of Europe as a food for domestic fowls or other birds, rather than for the use of man. Cakes made of the flour of this species, we are told by Thunberg, round, coloured, and baked, are sold in every inn in Japan.

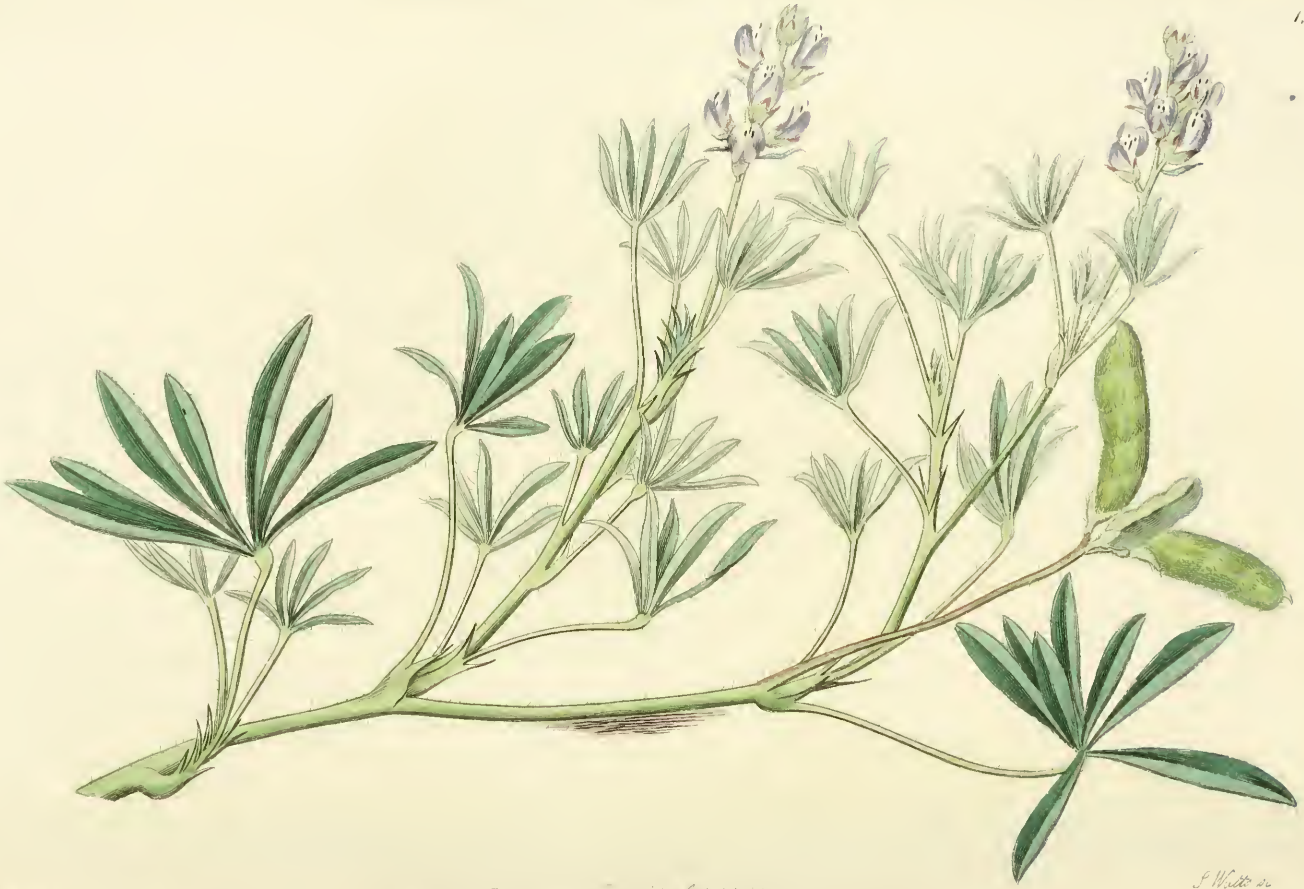
Loureiro states, that P. *odoratum* is cultivated throughout the kingdom of Cochin China as an excellent vegetable for eating with broiled meat and fish.

Humboldt states, that the South American Indians smoke the leaves of P. *hispidum* instead of tobacco.

P. *perfoliatum* is said by Loureiro to be used by the Chinese for softening ivory and bone, so as to render them more fit for being coloured and stamped with various figures. According to the same writer, P. *tinctorium* is used for dyeing linen of a beautiful blue or green colour. P. *chinense, barbatum,* and *aviculare,* are cultivated in Japan for the same purpose; of these, we are informed by Thunberg that the former yields a sort of indigo,—the leaves being dried and pounded are made into cakes, in which state they are sold for dyeing both silk and cotton.

The medical properties of Polygonums are unimportant; none of the species are admitted into modern Materia Medicas, except the P. *bistorta.* The root of this abounds with an astringent principle, which has been said to be of the utmost efficacy in atonic and chronic diarrhœas, hæmorrhages, &c. The *Centumnodia* of the old Materia Medicas (P. *aviculare*) was said to have seeds endued with an emetic principle; but there appears to be no ground for the assertion. There is also a species known in Brazil, in the province of St. Paul, called *Erva de bicho,* which is not only used as a sort of sauce for all kinds of meat, but is administered, both externally and internally, as a kind of universal remedy for diseases and wounds.

J. L.



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Pub by J Ridgway 169 Piccadilly July 1 1829

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LUPÍNUS* micránthus.

Small-flowered Lupine.

DIADELPHIA *DECANDRIA.*

Nat. ord. LEGUMINOSÆ.
LUPINUS.—Suprà, vol. 13. *fol.* 1096.

L. *micranthus;* annuus, floribus subverticillatis sessilibus bracteolatis, calycis labio superiore bifido: inferiore integro, foliolis 5-7, lineari-spatulatis ciliatis, leguminibus 6-spermis transversim sulcatis, caule ramoso, radicibus granulatis.—*Douglas.*

Annuus. Radix *fibrosa, tuberculis carnosis, verruciformibus.* Caulis *erectus, ramosus, subpedalis, pilis brevibus albis pubescens.* Folia *digitata;* stipulis *subulatis, foliolis 5-7, lineari-spatulatis, suprà glabris, subtùs pilosis, ciliatis, carnosis, circiter 3 quartas unciæ longis.* Flores *subverticillati, pauci, sessiles.* Bracteæ *subulatæ, pilosæ, foliis atriores.* Calyx *sericeus, labio superiore bifido, inferiore integro.* Vexillum *ovatum, cæruleum, medio album, maculis 2-4ve nigris parallelis.* Alæ *oblongæ, vexillo æquales.* Carina *falcata, acuta.* Legumen *lineari-oblongum, transversè sulcatum, 5-6-spermum.* Semina *magna, fusca, grisea, nebulosa.*—Douglas.

If this is not to be compared in point of beauty with such fine species as L. perennis, ornatus, and others, which have been already figured in this work from Mr. Douglas's collections, it is nevertheless interesting as an addition to the number of species of annual Lupines.

According to Mr. Douglas, this has much affinity with Lupinus bicolor, published at fol. 1109 of this work, from which it differs in being more slender, and in flowering from four to six weeks earlier. It is more particularly to be distinguished from that species by the shortness of its alæ, its nearly sessile flowers, fleshy leaves, granulated roots, larger pods, and the colour and size of the seeds.

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* See fol. 1198.

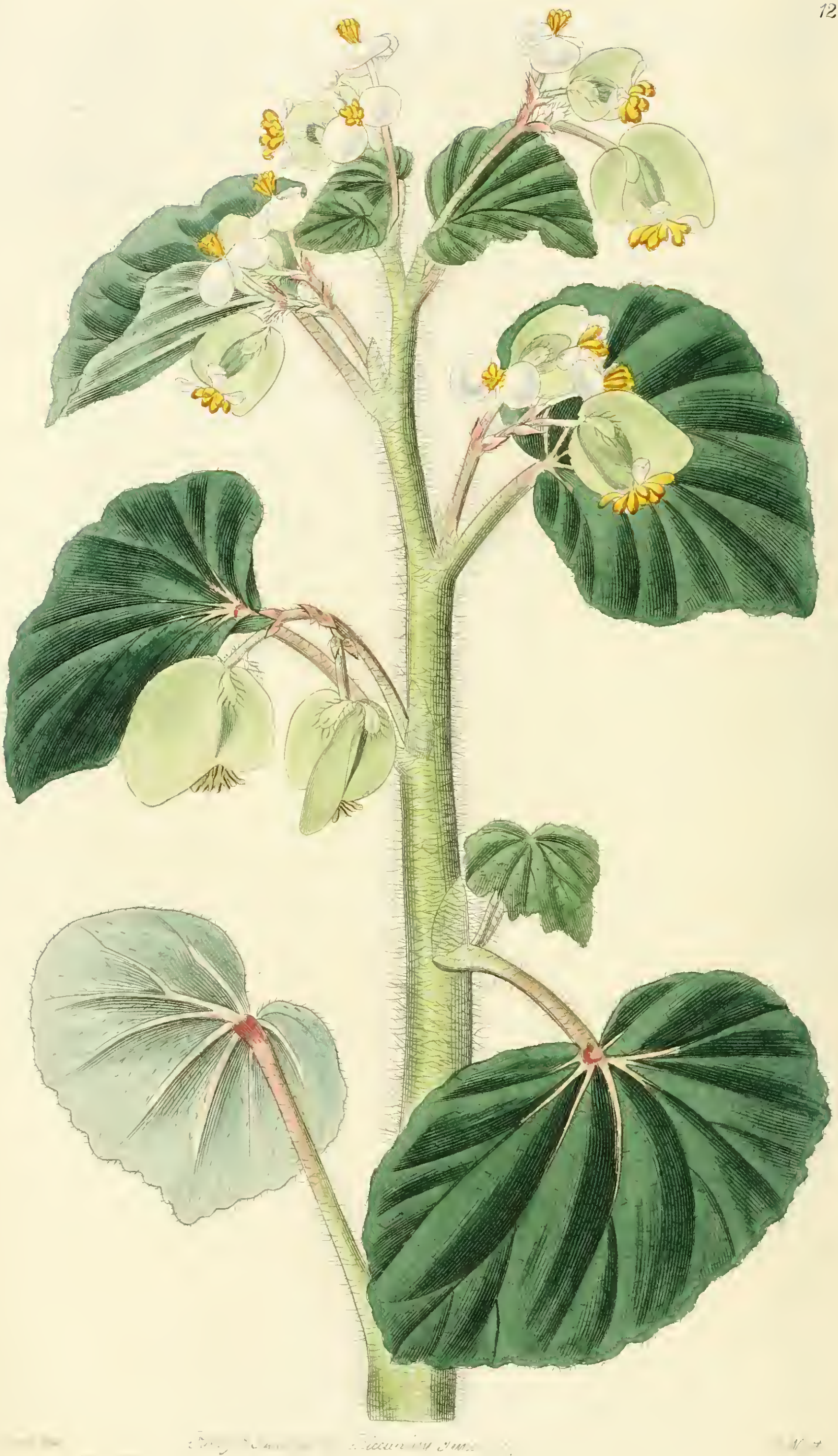
Mr. Douglas found it abundantly upon the gravelly banks of the southern tributaries of the Columbia, and in barren ground in the interior of California.

A hardy annual, flowering from May to July. Our drawing was made in the Garden of the Horticultural Society in 1828.

" Annual. *Root* fibrous, with warty, fleshy tubercles. *Stem* erect, branching, about a foot high, with short white downy hairs. *Leaves* digitate, with subulate, dark stipules. *Leaflets* 5-7, linear-spatulate, smooth above, ciliate, with minute, short, fine hairs below, thick and fleshy, three-fourths of an inch long. *Flowers* partly whorled, few, sessile. *Bracteæ* subulate, pilose, darker than the leaves. *Calyx* silky, upper lip bifid, under entire. *Vexillum* ovate, blue, white in the centre, with two or four parallel black dots. *Alæ* oblong, same length as the vexillum; *keel* falcate, acute. *Legumen* linear-oblong, with transverse furrows, 5 or 6-seeded. *Seeds* large, brownish gray, mottled." —*Douglas*.

J. L.

1252



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BEGÓNIA* villósa.

Shaggy Begonia.

MONŒCIA *POLYANDRIA.*

Nat. ord. Begoniaceæ.
BEGONIA.—Suprà, vol. 4. *fol.* 284.

B. *villosa;* foliis semicordatis obsoletè duplicatò-dentatis obtusis, petiolis ramisque villosis, capsulæ alâ majore rotundatâ.

Caulis *erectus, parùm ramosus, versùs fastigium villosus, deorsùm nudus.* Stipulæ *scariosæ.* Folia *semicordata, obtusa, obscurè duplicatò-dentata, nunc subintegerrima, utrinque pilosa, petiolis villosis.* Cymæ *paucifloræ.* Flores *albi, parùm rubescentes.* Petala 4. Capsulæ *alis rotundatis, nullo modo angulatis, alterâ majore.*

We distinguish this species from the B. humilis of Dryander, from which Mr. Haworth has properly separated the B. humilis of this work, fol. 284, under the name of Suaveolens, by its obtuse leaves, more rounded wings of the capsule, and shaggy branches and petioles. In some of the Gardens near London we have seen it named B. hirsuta, which is a distinct species, with deeply incised, serrated leaves.

B. semperflorens of Link and Otto's Abbildungen resembles this in many respects; but is distinguishable by the absence of hairs from the stem and petioles, and by its green, not scarious, stipulæ.

Our drawing was made in September last, in the Garden of the Horticultural Society, from a plant presented to that establishment by Sir Charles Lemon, by whom it was raised from Brazilian seeds. A stove plant, readily increased by seed.

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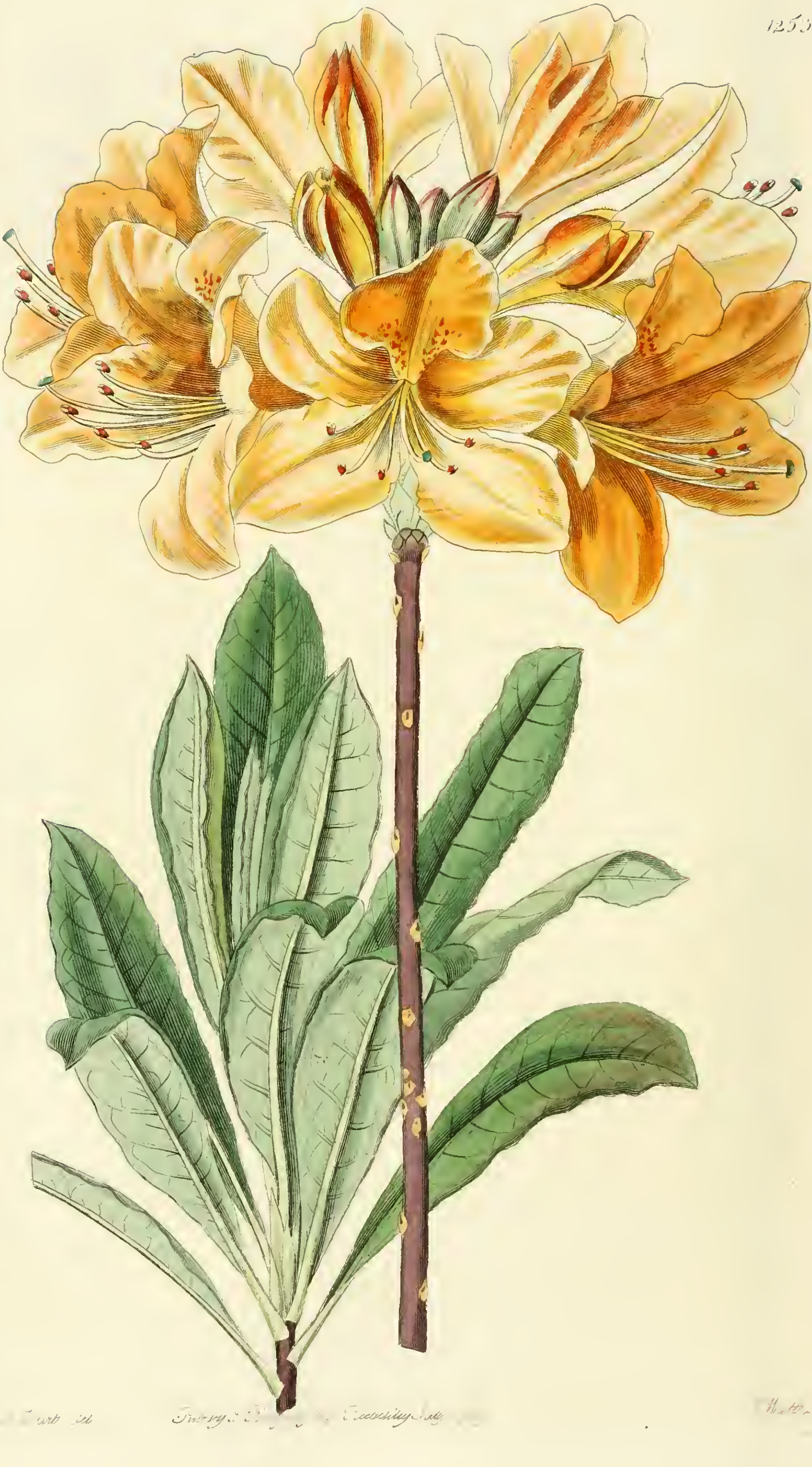
* Named in honour of Michel Begon, a Frenchman, born in 1638, who assisted Plumier in his works upon American Botany.

Stem erect, but little branched, shaggy towards the top, more naked downwards. *Stipulæ* scarious. *Leaves* half cordate, obtuse, obscurely doubly toothed, sometimes almost entire, especially when old, hairy on both sides, the petioles shaggy. *Cymes* few-flowered. *Flowers* white, with very little tinge of red. *Wings* of the capsule rounded, with no angles, one of them much larger than the rest.

J. L.

1253.



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1253

AZÁLEA* póntica; *var.* sinensis.

Chinese Yellow Azalea.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Ericeæ.
AZALEA. — *Suprà, vol.* 2. *fol.* 120.

A. *pontica*; foliis oblongis basi angustatis subundulatis rugosis subtùs glaucescentibus pilosis, corymbo terminali capitato, corollæ tubo piloso-glanduloso limbo subæquali.
A. pontica. *Linn. sp.* 1669, *aliorumque.*
Var. *sinensis.*
A. sinensis. *Lodd. botanical cabinet, t.* 885.

This fine plant has been received from China, at different times, both by Messrs. Loddiges of Hackney, and Mr. Wells of Redleaf, with each of whom it has now produced its flowers. The specimen from which our drawing was taken was communicated by Mr. Wells in April of the present year; and about the same time we saw a bush in Messrs. Loddiges' Greenhouse covered with clusters of blossoms. It is one of the most shewy plants we know, and is, upon the whole, decidedly superior to the now common Azalea pontica of Asia Minor. Mr. Wells's plant is not exactly the same as that represented in the *Botanical Cabinet*, differing from it in being a little more glaucous on the under side of the leaves, and in having the midrib covered beneath with long, scattered hairs.

That the plant now figured, and those in the possession of Messrs. Loddiges, were really introduced from China, there is no kind of doubt. But it does not to us appear by

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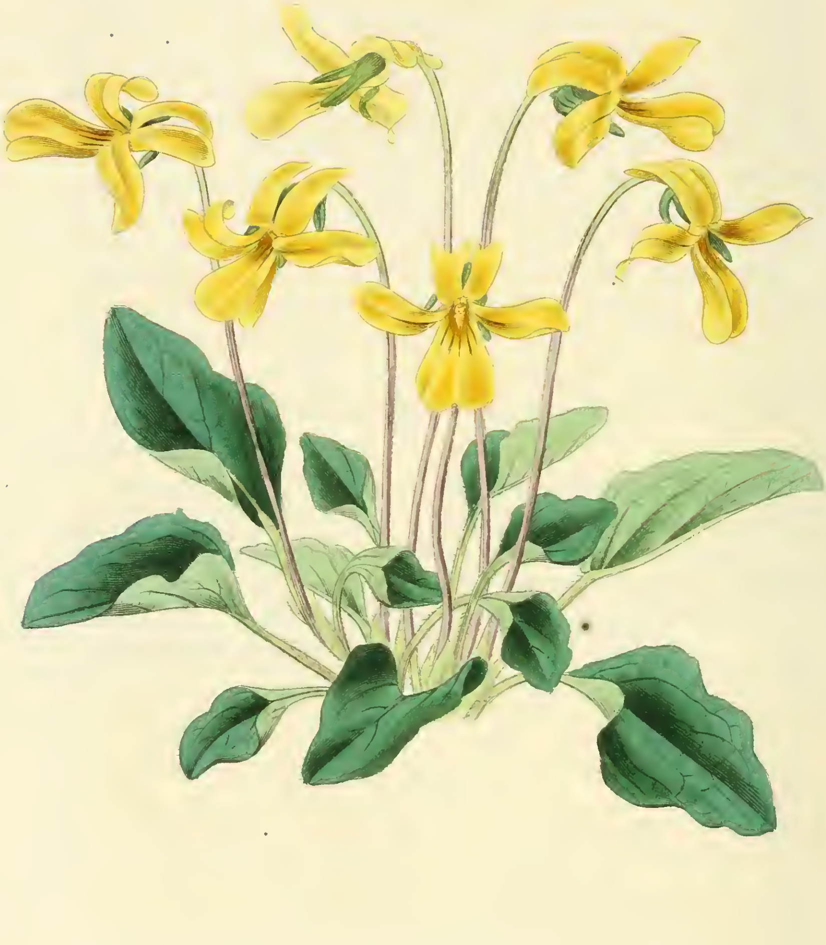
* Azalea is a slight alteration of ἀζαλέος, arid, and derives its name from the dry rocky places in which the species are found.

any means certain that it is therefore a native of China, as it is commonly believed to be; and for the following reasons. In the first place, no trace is to be found among the writers upon Chinese plants of such a thing as a yellow Azalea—a circumstance which is not likely to have occurred if so beautiful a species as the present had either been long cultivated in the Chinese Gardens, or been a native of their country. In the second place, this plant has as little affinity to the genuine Chinese Azaleas as it can have to remain in the same genus with them; and thirdly, it does not seem to us practicable to distinguish it from the Azalea pontica, from which it differs chiefly in its head of flowers being more compact, its stamens shorter, and the upper segment of the corolla being spotted. We think it extremely probable that these yellow Chinese Azaleas have found their way to China from the Caucasus, by the intervention of some of the Russian caravans which annually visit Nertchinsk for the purpose of trading with the Chinese.

However this may be, we are clearly of opinion that it is not botanically separable from the species to which we have referred it.

Probably quite hardy. Messrs. Loddiges have hitherto kept their plants in the Greenhouse; and the specimen from which this drawing was taken was also produced in a Conservatory: but we think there can be no reasonable doubt of its being as patient of cold as the species of which we consider it a variety.

J. L.



1254

VÍOLA* præmórsa.

Bitten-rooted Violet.

PENTANDRIA *MONOGYNIA.*

Nat. ord. VIOLACEÆ.
VIOLA. — *Suprà, vol.* 1. *fol.* 54.

§ CHAMÆMELANIUM.—*Stigma* sphæroideo-capitatum, utrinque fasciculis pilorum onustum, foraminulo minuto sublaterali. *Stylus* compresso-clavatus. *Stamina* oblonga approximata. *Torus* planiusculus. *Capsula* sæpè trigona. *Folia* seminalia sæpiùs subrotunda. *Petala* 2, ungue barbata.—*De Gingins in Dec. prodr.* 1. 300.

V. *præmorsa;* caule simplici erecto, foliis ovato-oblongis petiolatis hirsutis integris, capsulis pubescentibus.

V. præmorsa. *Douglas in herb. Hort. Soc.*

Radix *crassa, carnosa, præmorsa.* Herba *perennis, subacaulis, villosa.* Folia *ovato-oblonga, subrhomboidea, cucullata, obsoletè dentata, petiolorum longitudine;* stipulæ *lanceolatæ, integerrimæ.* Pedunculi *foliis duplò longiores.* Sepala *linearia, pilosa.* Corolla *lutea, conspicua;* petalis *superioribus patentissimis, inferiore cuneato basi striato.* Stigma *capitatum, utrinque pilosum.* Capsula *pubescens.*

A common plant, according to Mr. Douglas, in dry upland soils, under the shade of solitary Pine-trees on the banks of the Columbia, and the plains of the river Aguilar, in California, flowering in April. With us it is an exceedingly pretty perennial, hardy, and growing readily among rockwork, on the north side of large stones.

Our drawing was made in the Garden of the Horticultural Society in 1828.

The nearest affinity of this plant is, as Mr. Douglas informs us, with V. *Nuttallii,* from which it differs in being larger, and having more conspicuous flowers and a denser pubescence.

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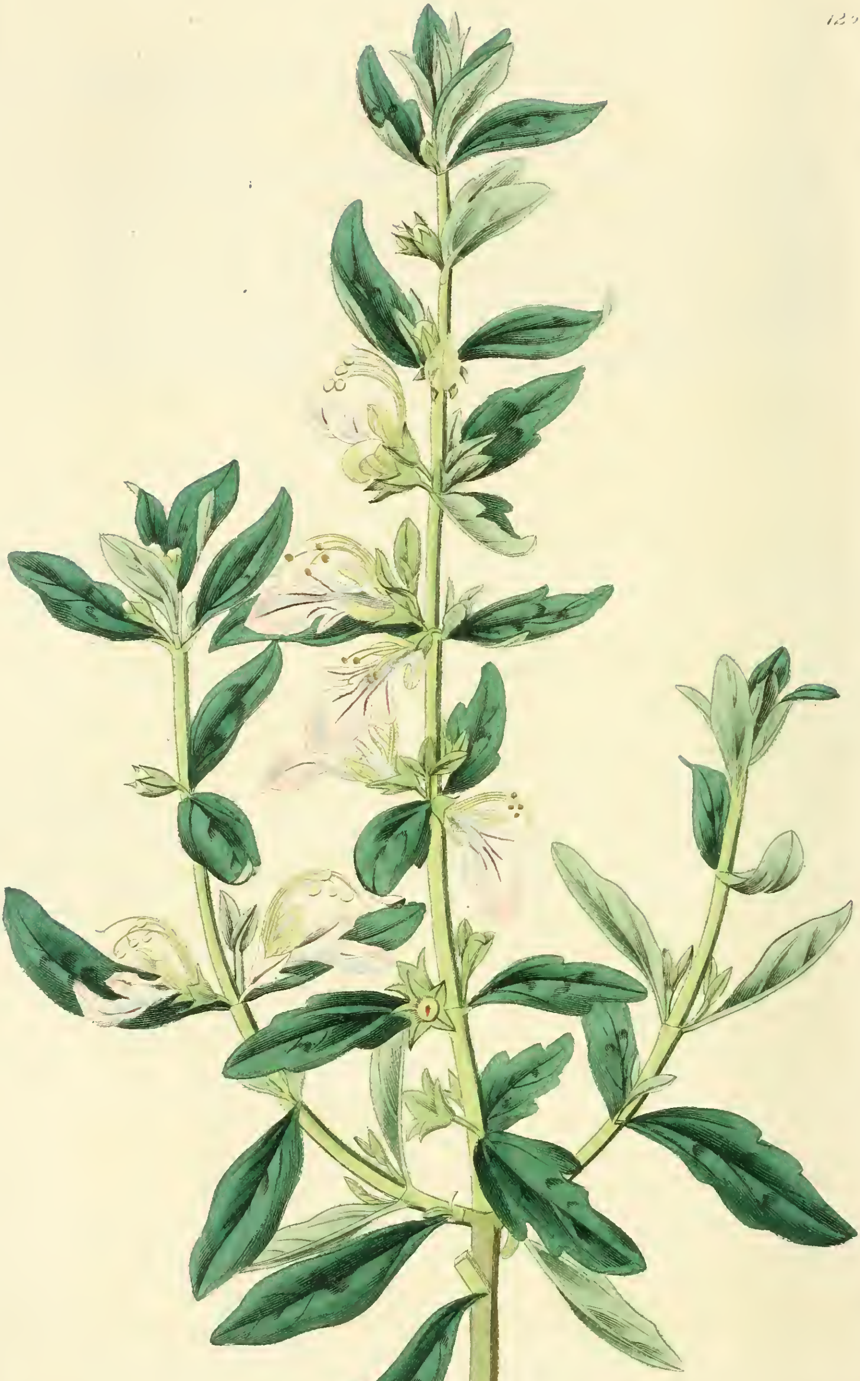
* The ἴον of the Greeks, which was our Viola odorata, gave rise to the name of Viola.

Root thick and fleshy, præmorse. The whole plant densely pubescent, nearly stemless. *Leaves* oblong-ovate, obtuse, villous, distantly denticulated, about as long as the petioles. *Stipules* lanceolate, entire. *Peduncles* almost twice as long as the leaves. *Flower* large, yellow. *Sepals* linear, pilose. *Petals* widely spreading; the lower broader, with two streaks at the base, cuneate. *Stigma* capitate, hairy on each side. *Capsule* oblong, pubescent.

J. L.



1255

TEÚCRIUM* Orchidéum.

Orchis-flowered Teucrium.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. LABIATÆ.

TEUCRIUM. — *Calyx* 5-fidus, subæqualis. *Corolla* subunilabiata; tubo brevi; labio superiore abbreviato bipartito; laciniis lateraliter reflexis; labio inferiore trilobo; lobo intermedio majore. *Stamina* 4, didynama, è fissurâ labii superioris exserta.——Frutices, suffrutices, *aut* herbæ. Folia *opposita.* Flores *axillares, verticillati aut terminales capitato-congesti, v. verticillato spicati.* Corollæ *albidæ, flavidæ, violaceæ,* aut *purpureæ.* — Kunth. synops. 2. 83.

T. *orchideum;* foliis oblongis obtusis integerrimis trilobisque pubescentibus, dentibus calycis ovatis, limbo corollæ 5-lobo secundo labelliformi, floribus axillaribus solitariis, caule suffruticoso.

Suffrutex *herbaceus, erectus, ramosus.* Folia *utrinque subpubescentia, nunc oblonga, integerrima, crenatave, nunc triloba, lobis lateralibus brevibus.* Flores *solitarii, axillares, brevissimè pedicellati, foliis breviores.* Calyx *campanulatus,* ½ *5-partitus, dentibus ovatis.* Corolla *pubescens, lutescens, rubro variegata, limbo toto aperto labelliformi.*

A half-hardy greenhouse plant, flowering in the open border, in July, August, and September. It is a native of Chile, whence seeds were brought to the Horticultural Society, in 1826, by Mr. James M'Rae, who found it common in the neighbourhood both of Conception and Valparaiso.

An herbaceous under-shrub, branching a good deal, and growing in an upright manner. *Leaves* pubescent on each side, sometimes oblong and entire, or crenated, sometimes 3-lobed, the lateral lobes being short. *Flowers* solitary, axillary, on very short stalks, not so long as the leaves. *Calyx* campanulate, half 5-parted, with ovate teeth. *Corolla* pubescent, yellowish, variegated with red, its limb spread open, so as to resemble the labellum of an Orchideous plant.

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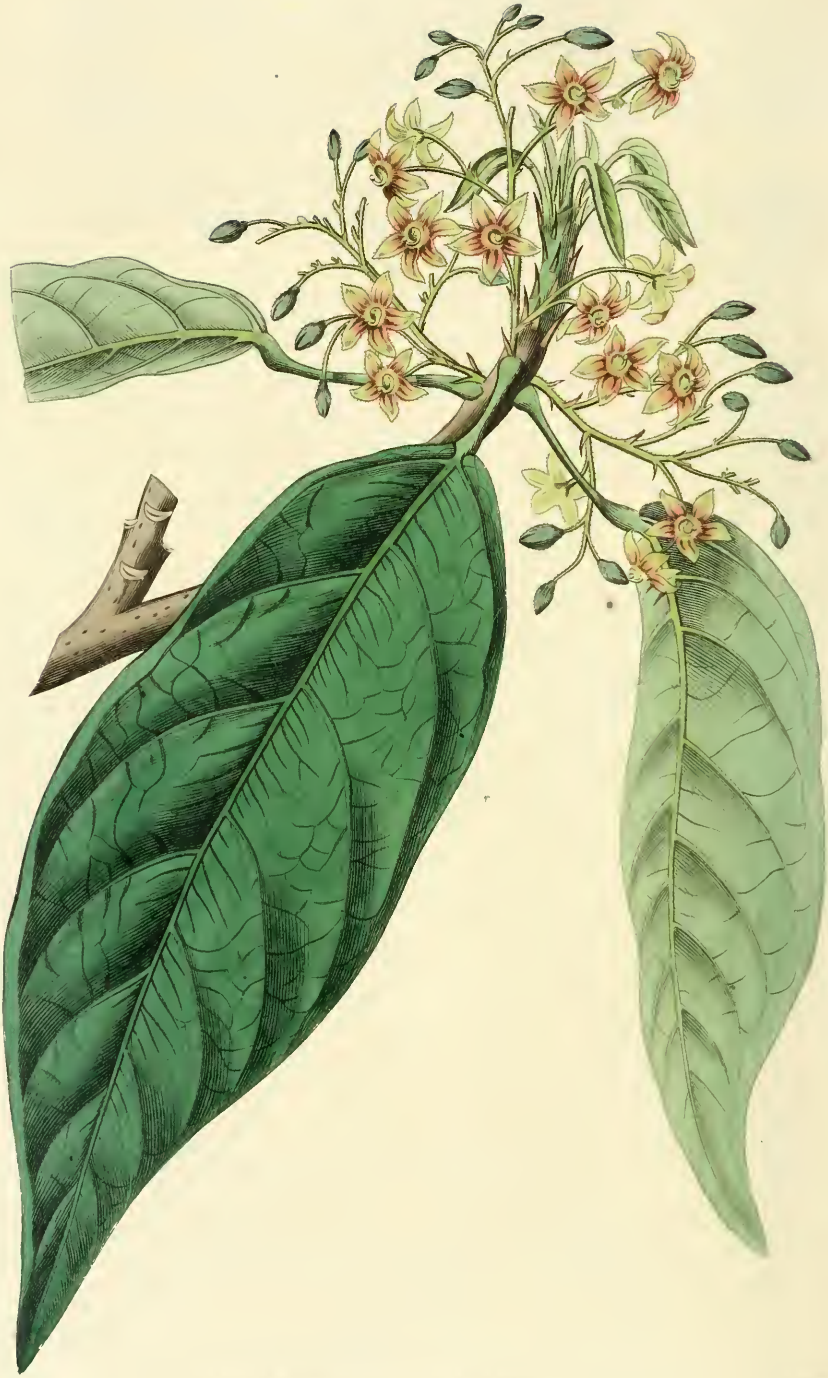
* Teucrium is one of the few instances, among the ancients, of plants being named in honour of men. The Trojan prince Teucer was commemorated by the herb τεύκριον, which was the Teucrium lucidum of moderns.

Our drawing was made in August 1828, in the Garden of the Horticultural Society. It is increased by cuttings.

J. L.



STERCULIA* lanceoláta.

Lanceolate Sterculia.

MONŒCIA *MONADELPHIA.*

Nat. ord. STERCULIACEÆ.
STERCULIA. — *Suprà, vol.* 3. *fol.* 185.

S. *lanceolata;* foliis integerrimis lanceolatis, carpellis oblongis oligospermis. *Decand. prodr.* 1. 481.

S. lanceolata. *Cavanilles dissert.* 5. *p.* 187. *t.* 143. *f.* 1. *Spreng. syst.* 3. 81.

Arbor *mediocris, ramis teretibus, glabris.* Folia *angustè lanceolata v. oblongo-lanceolata, acuminata, membranacea, utrinque glaberrima, petiolata; petiolisque utrinque tumidis.* Flores *parvi, paniculis parvis pilosis dispositi.* Calyces *stellati, patentes, rubro-fusci.* Cætera *Sterculiæ.*

This species is a native of China, whence it was brought to the Horticultural Society, in 1822, by Mr. John Potts, one of their collectors. It is a stove tree, producing its inconspicuous, dull-red flowers in May and June: the foliage is remarkably like that of Reevesia chinensis, and constitutes its only claim to notice as an ornamental garden plant, unless it should hereafter produce ripe fruits, which, according to Cavanilles, are bright scarlet, with black round seeds, that stick to each side of the follicle when it opens.

It was first described by this writer from a Chinese drawing sent to Jussieu by the Father D'Incarville, in which the leaves are much smaller than those here represented; but we have seen the size of the leaves of the cultivated plant vary so much, that we cannot attach any value to that circumstance.

Professor Sprengel refers to this the Helicteres undulata of Loureiro; but if the S. lanceolata was only known to that Botanist by the figure of Cavanilles, it cannot be doubted that he has mistaken the undulation of the fruit for that of the leaves.

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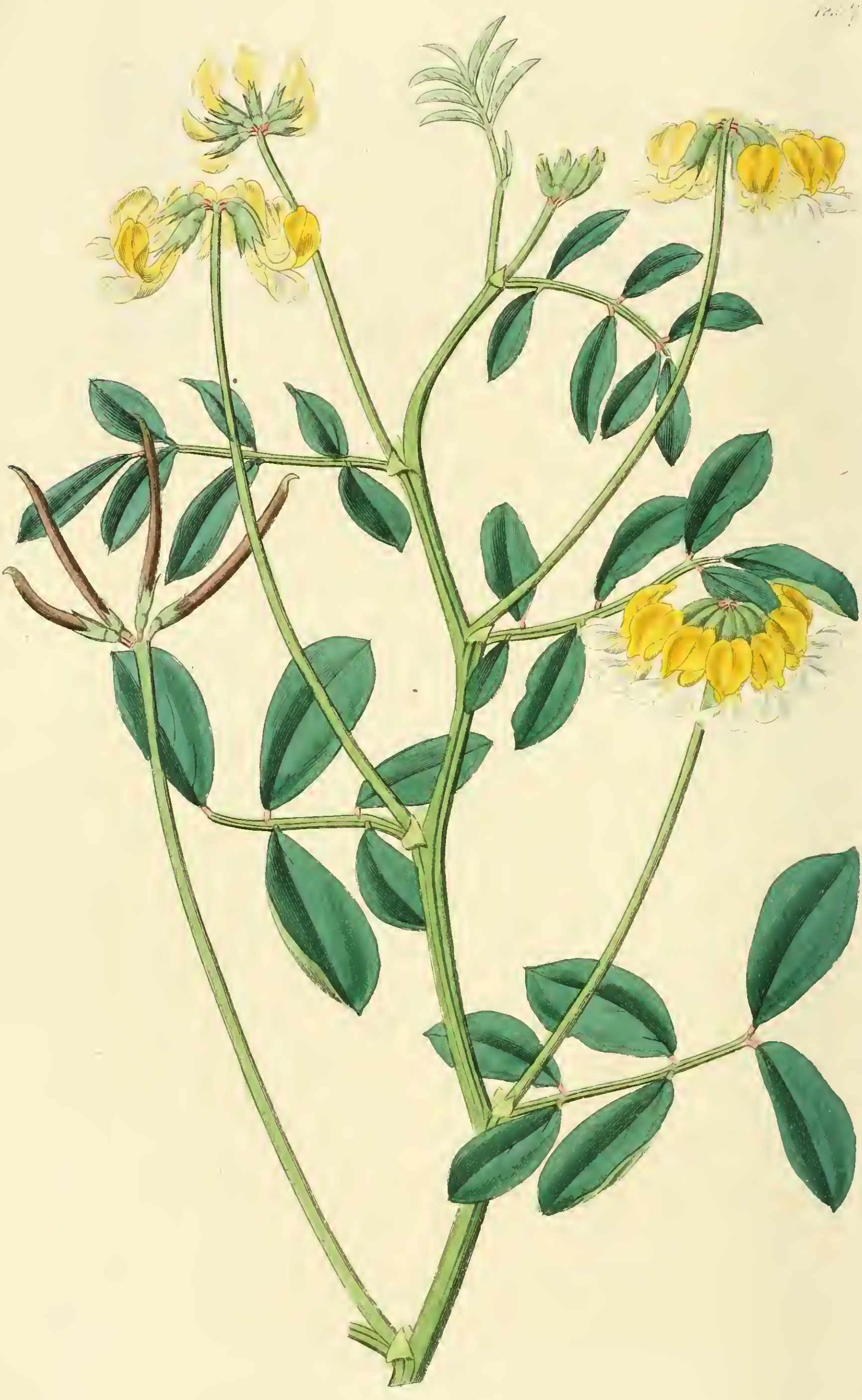
* So called from the fœtid smell of some of the species.

A small *tree*, with taper, smooth branches. *Leaves* narrowly lanceolate, or oblong-lanceolate, acuminate, membranous, quite smooth on each side, stalked, the petioles tumid at each end. *Flowers* small, arranged in small hairy panicles. *Calyxes* stellate, spreading, reddish brown.

J. L.

1209



1257

HOSÁCKIA* bícolor.

Two-coloured Hosackia.

◆

DIADELPHIA *DECANDRIA.*

Nat. ord. Leguminosæ. § *Loteæ.*

HOSACKIA.—*Calyx* campanulatus 5-fidus. *Alæ* vexillum subæquantes patentes. *Carina* rostrata. *Stylus* filiformis. *Stigma* capitatum. *Legumen* cylindraceum, v. subcompressum, rectum, læve.—— Herbæ, foliis *imparè pinnatis,* foliolis *sæpiùs alternis,* stipulis *membranaceis minutis aut obsoletis.*—Bentham MSS.

H. *bicolor;* glabra, floribus umbellatis ebracteatis, foliis 7-9-foliolatis. *Bentham MSS.*
Hosackia bicolor. *Douglas in herb. Hort. Soc.*
Lotus pinnatus. *Hooker in bot. mag.* 2913.

" The whole plant glabrous. *Root* soft and creeping. *Stems* ascending, a foot and a half long, branching at the base, flexuose, terete, striate. *Leaves* pinnate, with 2, 3, or 4 pair of leaflets, nearly opposite, with a terminal one at a short distance from the last pair; *leaflets* nearly sessile, oblong or obovate, obtuse or mucronate. *Stipules* small, membranaceous. *Peduncles* axillary, about the length of the leaves. *Flowers* from 6 to 10, in umbels, pendulous, on short pedicels, without any or with very small membranaceous bracteæ at the base of the umbel. *Calyx* campanulate, rather fleshy at the base, the rest slightly membranaceous, with 5 rather unequal teeth, the two upper ones being less deeply cleft, and rather longer; the two lateral teeth, and the inferior one, equal and linear. *Petals* on long claws, that of the vexillum distant from the others. *Vexillum* yellow, ovate, spreading, and thrown back on the calyx. *Alæ* white, spreading, oblong, undulate on the margins. *Carina* yellow, rostrate, nearly as long as the alæ. *Stamina* diadelphous, the solitary one generally without any anther. *Style* incurved, filiform. *Stigma* capitate. *Legume* straight, or slightly incurved, about two inches long."—*Bentham.*

A pretty perennial plant, found by Mr. Douglas in overflowed meadows between Fort Vancouver and the grand rapids of the Columbia. It is quite hardy, and easily increased by seeds. Our drawing was made in the Garden of the Horticultural Society, in August 1824.

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* Dedicated by Mr. Douglas to David Hosack, M.D., F.R.S., &c., of New York, a gentleman to whom the scientific men of North America owe the same gratitude as those of England did to Sir Joseph Banks.

For the characters of the genus, and for the following valuable remarks, we are indebted to our friend Mr. George Bentham, who has studied that portion of Leguminosæ to which Hosackia belongs with much care: —

" This plant has much of the habit, as well as the inflorescence and fruit, of a Lotus, to which genus Dr. Hooker has referred it in the *Botanical Magazine;* but, independently of the characters which may be drawn from the position of the alæ, and the capitate stigma, the pinnate, not ternate, leaves, and the absence of the large foliaceous stipulæ of Lotus, — characters which appear to be of importance among most of the Leguminosæ,— perhaps alone suffice for the adoption of the genus Hosackia proposed by Mr. Douglas.

" To this genus should be referred the Lotus sericeus of Pursh, which Nuttall, on account of the position of the alæ, transferred to Trigonella, under the name of T. americana, but which differs from the other species of that genus by its fruit being cylindrical, and not reticulate, the size of the carina, and its general habit. The leaves in this species are generally trifoliolate; but then the two lower leaflets are seldom opposite, as in the truly trifoliolate genera; and in the leaves of the more robust specimens, a fourth, and even a fifth leaflet may often be observed: the stipules are so small as scarcely to be visible.

" Specimens of this species were also brought by Mr. Douglas from the North-west coast of America, as well as of two other species, which may be referred to the same genus, distinguishing them by the following characters: —

1. H. *bicolor* (tab. 1257); glabra, floribus umbellatis ebracteatis foliis 7-9-foliolatis.

2. H. *decumbens;* pubescens, floribus umbellatis bracteâ 1-3-foliolatâ foliis 4-5-foliolatis.

Foliola alterna. *Stipulæ* minutissimæ aut nullæ. *Calyx* profundè 5-fidus, laciniis linearibus æqualibus villosis. *Petalorum* forma ferè ut in H. bicolore. *Filamenta* omnia antherifera.

3. H. *Purshiana;* pubescens, pedunculis 1-floris bracteâ sub flore monophyllâ, calyce villoso, foliis 3- rarò 4-5-foliolatis.

Lotus sericeus. *Pursh. flor.* 2. *p.* 489.
Trigonella americana. *Nutt. gen.* 2. *p.* 120. *Ser. in Dec. prodr.*

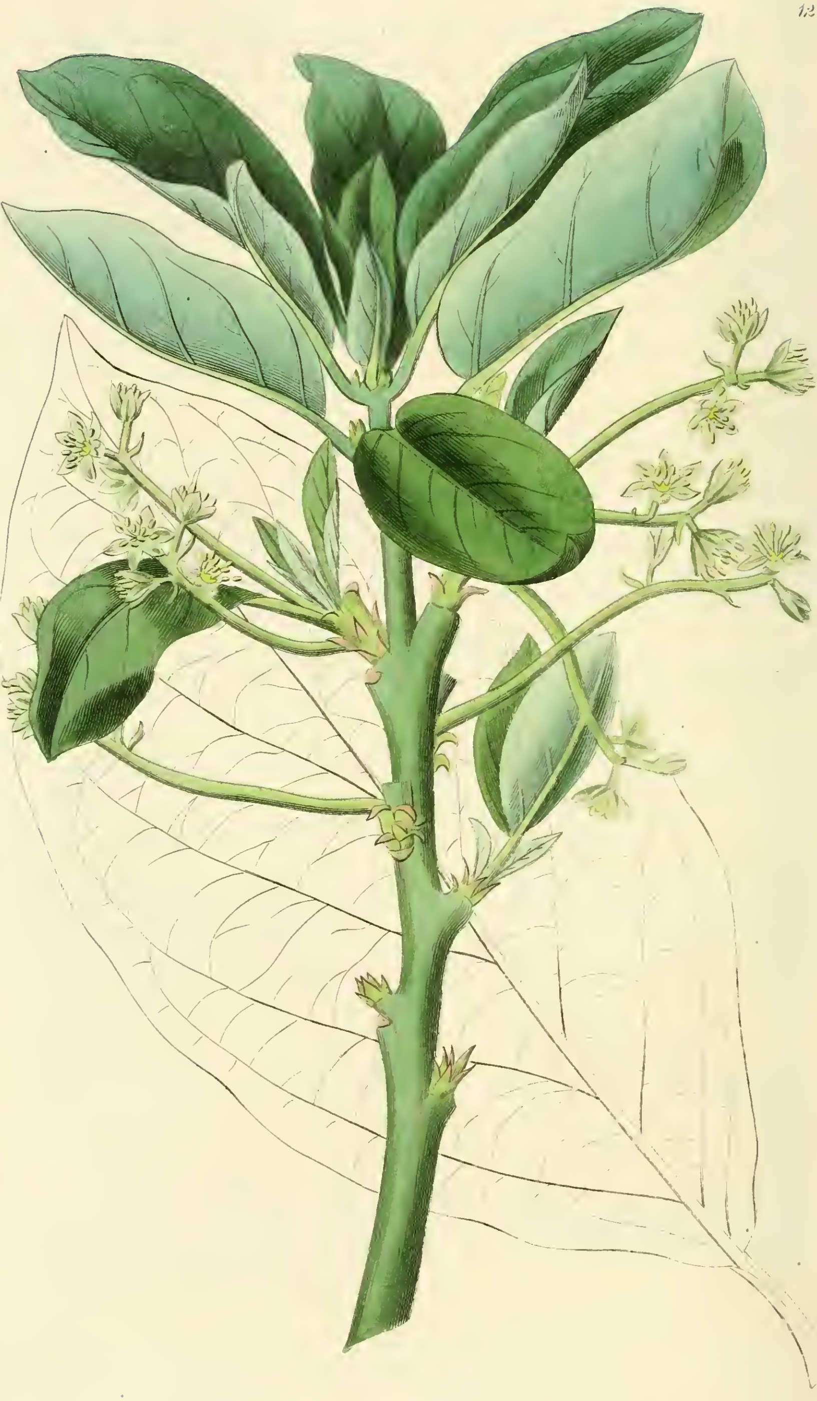
Foliola sæpiùs alterna. *Stipulæ* minutissimæ aut nullæ. *Calyx* villosus, laciniis linearibus corollam subæquantibus. *Corolla* parva petalis vix stipitatis. *Stigma* capitatum.

4. H. *parviflora;* glaberrima, pedunculis 1-floris, bracteâ sub flore sæpiùs 3-foliolatâ, calyce subglabro, foliis 4-6-foliolatis.

Radix tuberculis pisiformibus munita. *Planta* tota glaberrima glaucescens; foliola alterna oblonga obtusa. *Stipulæ* minutissimæ aut nullæ. *Calyx* subglaber, laciniis brevibus parcè pilosis. *Corolla* ut in H. Purshianâ, sed minor. *Stigma* capitatum."

J. L.

1258



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PERSÉA* gratíssima.

The Avocado Pear.

◆

ENNEANDRIA *MONOGYNIA.*

Nat. ord. LAURINEÆ.

PERSEA Plumier.—*Flores* hermaphroditi. *Calyx* limbo sexpartito sæpiùs inæquali persistente aut deciduo. *Stamina* 12, duplici serie disposita; interiorum tria laciniis interioribus opposita sterilia; tria laciniis exterioribus opposita fertilia basi glandulosa. *Antheræ* quadriloculares. *Stigma* subcapitatum. *Drupa* calyce persistente sexlobo suffulta.——Arbores, foliis *alternis, magis minusve coriaceis, integerrimis, exstipulatis;* pedunculis *axillaribus et terminalibus, sæpiùs paniculatis et corymbosis.*—Kunth. synops. 1. 453.

P. *gratissima;* foliis elliptico-oblongis obtusiusculis subtùs hirto-pubescentibus glaucescentibusque, floribus corymbosis axillaribus, calycibus externè cano-tomentosis, fructu pyriformi. *Kunth.* l. c.

Laurus Persea. *Jacq. obs.* 1. *p.* 37. *Swartz obs.* 152. *Willd. sp. pl.* 2. 480.

Persea gratissima. *Gærtn. fil. fruct.* 3. *p.* 222.

Laurus? foliis oblongo-ovatis, fructu obversè ovato, pericarpio butyraceo. *Browne jamaic. p.* 214.

The Albecato, Abacado, or Avocado Pear. *Sloane jamaic.* 2. 133. *t.* 222. *f.* 2.

The Avocado, or, as it is often called, Alligator Pear, is one of the most esteemed fruits of the West Indies. In this country it is only cultivated in the stove, of which it is one of the rarest species.

Our drawing was made in the princely Garden of his Grace the Duke of Northumberland, at Syon,—an establishment which, whether we view it with regard to the

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* The περσαῖα, or περσέα, of the Greeks, was a fruit-tree brought out of Æthiopia by the first inhabitants of Egypt; and is supposed to have been the Cordia myxa of moderns. But why the name should have been applied to an American plant, it would be difficult to explain.

Botanical or Horticultural interest that attaches to it, promises to be soon the most important, as it is already the most magnificent, in Europe.

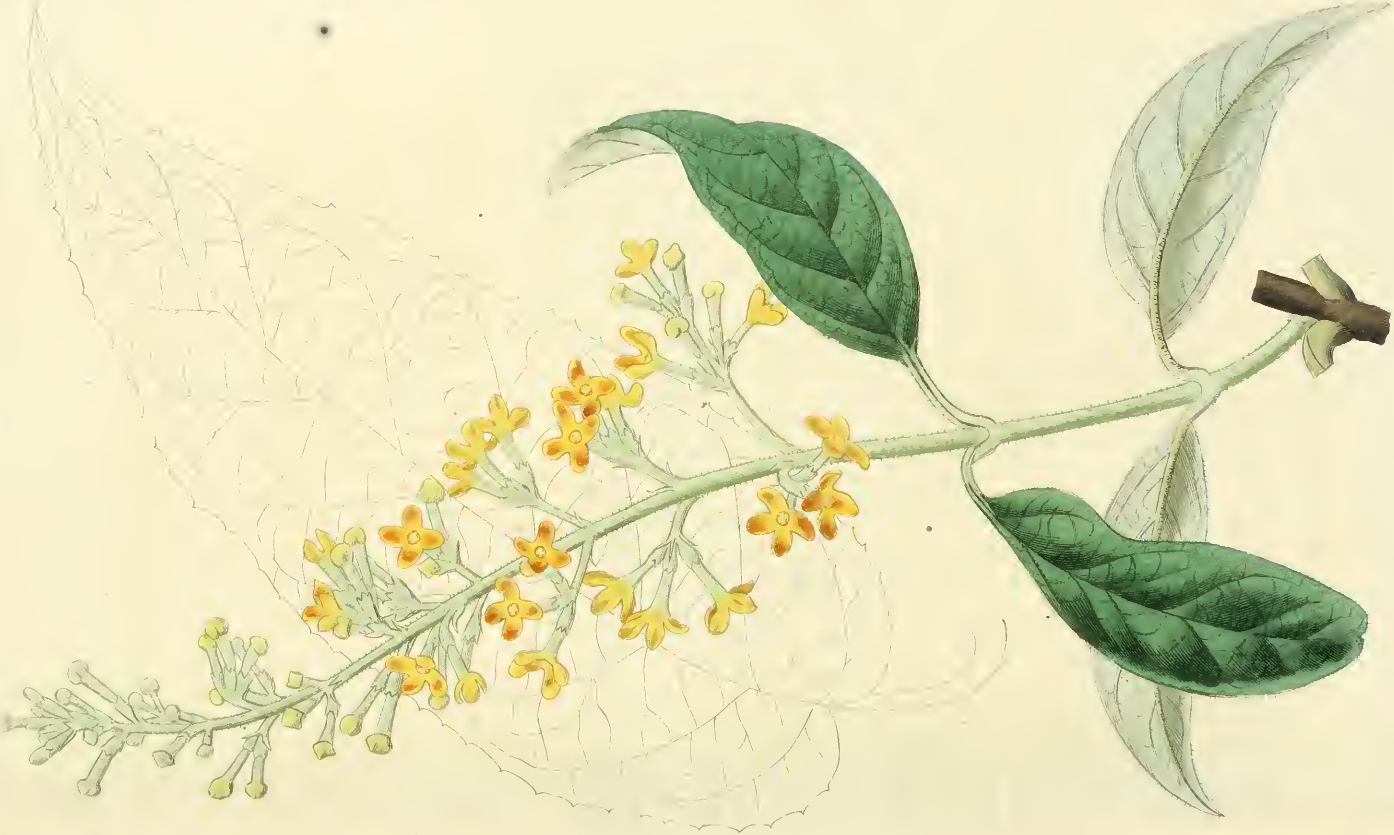
Sir Hans Sloane thus speaks of the Avocado: —

" This tree grows commonly to the size of our largest apple-trees in Europe, and spreads pretty wide at the top. The branches are very succulent and soft, the leaves oblong and veiny, and the fruit of the form of a pear; but the pulp is covered with a tough skinny coat, and contains a large rugged seed, which is wrapped up in one or two thin membranous covers. The fruit of this tree is one of those that is held in the greatest esteem amongst all sorts of people in these colonies: the pulp is of a pretty firm consistence, and has a delicate rich flavour; it gains upon the palates of most people, and becomes soon agreeable even to those who cannot like it at first; but is so rich and mild, that most people make use of some spice or pungent substance to give it a poignancy; and for this purpose, some make use of wine, some of sugar, some of lime-juice, but most of pepper and salt. Most sorts of creatures are observed to feed on this fruit with pleasure; and it seems equally agreeable to the horse, the cow, the dog, and the cat, as well as to all sorts of birds; and when plenty, makes a great part of the delicacies of the negroes.

" The tree requires some care, a rich soil, and a warm situation, to raise it to perfection. It was first introduced from the continent."

J. L.

1239



Pub by J Ridgway 169 Piccadilly Aug 1 1829

J Watts

1259

BÚDDLEA* heterophýlla.

Various-leaved Buddlea.

TETRANDRIA *MONOGYNIA.*

Nat. ord. SCROPHULARINEÆ.

BUDDLEA Linn.—*Calyx* quadrifidus æqualis. *Corolla* campanulata aut tubulosa; limbo quadrifido, regulari. *Stamina* 4, æqualia, inclusa, rarissimè (in B. salicifoliâ) exserta. *Stigma* capitatum aut clavatum. *Capsula* bilocularis, septicidò bivalvis; valvis bifidis; placentâ centrali demùm liberâ.——Arbores frutices *aut* herbæ, ramis foliis*que oppositis integris.* Flores *terminales, paniculati, sæpiùs capitato-conglomerati, rariùs axillares, verticillati.* Corollæ *flavidæ aut albidæ.*—Kunth synops. 2. 110.

B. *heterophylla;* ramis teretibus lanatis, foliis subtùs lanatis inferioribus cordato-oblongis acuminatis denticulatis superioribus ovato-lanceolatis subintegerrimis, floribus spicato-paniculatis lanatis.

Frutex *ramis diffusis, nullo modo tetragonis.* Folia *suprà subpilosa incana superiora vel basi ovata v. attenuata.* Flores *lutei.*

The native country of this plant is not known: we presume it is South America, from its great resemblance to B. americana and its allies, from all of which, however, it is specifically distinct.

It is a handsome stove plant, flowering from January till May. Our drawing was made in Mr. Lee's Nursery.

Particularly distinguished by the difference in form between its upper and lower leaves, and by its taper branches and bright-yellow flowers, both densely covered with down. The young flowering shoots have a pendulous direction, which adds much to the beauty of the plant.

J. L.

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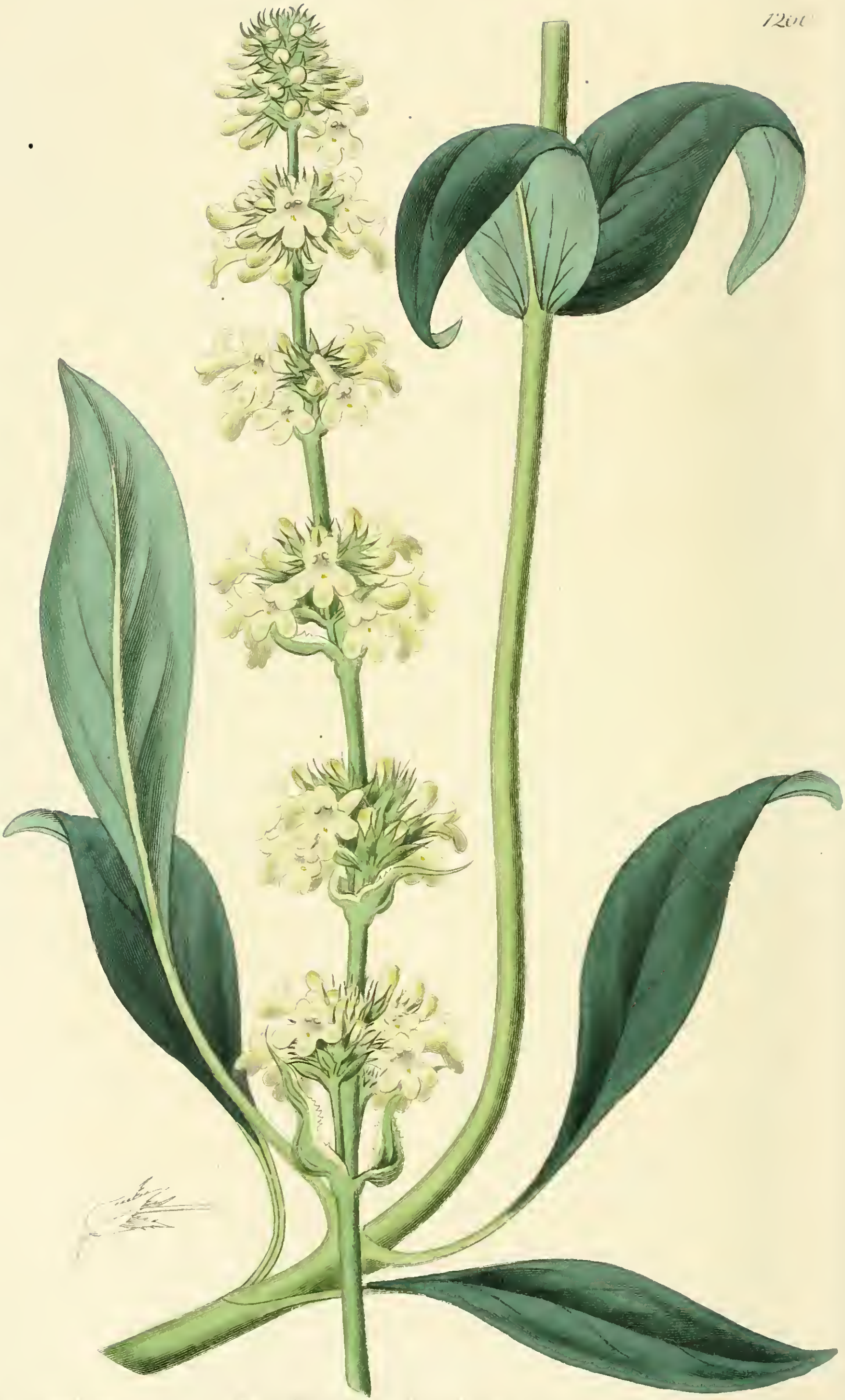
* So called after Adam Buddle, an ancient English Botanist, whose Herbarium is still preserved in the British Museum.



PENTSTÉMON* confértum.

Clustered-flowered Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ.
PENTSTEMON. — *Suprà, vol.* 13. *fol.* 1121.

P. *confertum;* foliis integerrimis glabris: radicalibus spatulatis acuminatis longè petiolatis, superioribus sessilibus ovatis acuminatis, verticillis multifloris confertis subaphyllis, corollâ calyce paulò longiore.

P. confertum. *Douglas in herb. Hort. Soc.*

Perennis. Caulis *erectus, simplex, ascendens, teres, viridis, lucens, pedalis bipedalisve.* Folia radicalia *lanceolata, in petiolo attenuata, integerrima, longè petiolata;* caulina *subamplexicaulia, in bracteis laceris, membranaceis, acuminatis, demùm mutata.* Flores *verticillati, conferti, subsessiles, numerosi.* Calyx *laciniis acutis, mucronatis, sublaceris, v. fimbriatis.* Corolla *tubulosa, subventricosa, pallidè ochroleuca, bilabiata, extùs glabra; labio superiore bilobo, inferiore pilis brunneis barbato.* Antheræ *glabræ, lobis divaricatis.* Rudimentum *staminis 5-ti apice supernè barbatum.*—Douglas.

A very common plant, according to Mr. Douglas, in open places, in mountainous Pine woods, in dry sandy soils, between Salmon River and the Kettle Falls in the Columbia, in the 48° north lat.; also in the valleys of the Rocky Mountains, in similar soil, at an elevation of 7000 feet above the level of the sea: flowering in July and August.

It was introduced by its discoverer in 1827, in the autumn of which year it flowered in the Garden of the Horticultural Society, where our drawing was made.

It is by no means one of the handsomest of the genus; but it is a truly distinct species.

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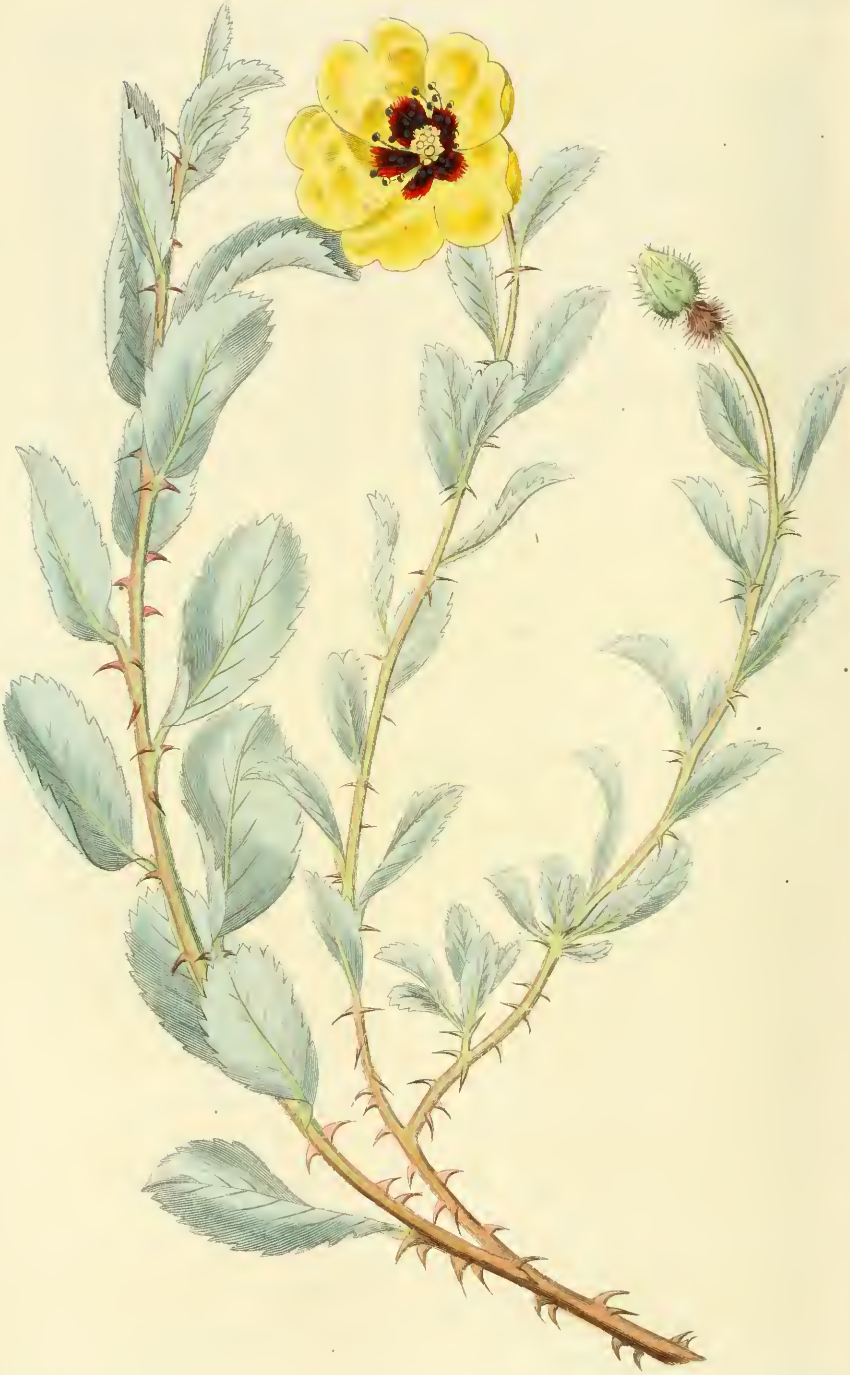
* See fol. 1245.

A hardy perennial, propagated by seeds and division of the roots. It will grow in any common garden soil.

"*Stem* erect, simple, smooth, green, and glossy, varying in height from 1 to 2 feet. *Radical leaves* lanceolate, tapering to the base, quite smooth and entire, on long stalks; *cauline leaves* sessile, somewhat amplexicaul, ovate-acuminate, passing into membranous, lacerated, acuminate bracteæ. *Flowers* terminal, crowded, whorled, nearly sessile, numerous. *Segments of the calyx* acute, mucronate, slightly lacerated or fringed. *Corolla* tubular, somewhat ventricose, pale yellow, smooth externally; the upper lip 2-lobed, the lower bearded with brown hairs. *Stamens* as long as the tube; *anthers* smooth, with divaricating lobes. The rudiment bearded on the upper side at the apex, longer than the perfect ones."—*Douglas*.

J. L.

1261



LOẂEA* berberifólia.

Berberry-leaved Lowea.

ICOSANDRIA *POLYGYNIA.*

Nat. ord. ROSACEÆ.

LOWEA. — *Folia* simplicia exstipulata. *Aculei* sæpiùs compositi. *Cætera* Rosæ.

Lowea berberifolia.
Rosa simplicifolia. *Salisb. hort. allert.* 359. *Parad. Lond.* 101. *Olivier voyage* 5. 49. *abl. t.* 43.
R. berberifolia. *Pallas in nov. act. Petr.* 10. 379. *t.* 10. *f.* 5. *Willd. sp. pl.* 2. 1063. *Ait. Kew. ed. alt.* 3. 258. *Smith in Rees in l. Redouté ros.* 1. 27. *t.* 2. *Lindley Rosarum monogr. p.* 1. *ed. gall. p.* 23. *Decand. prodr.* 2. 602. *Spreng. syst.* 2. 546. *Wallroth monogr. p.* 25.

This rare plant is a native exclusively of a few districts in the north of Persia, and of the desert of Songari in Chinese Tartary. From the latter place we possess specimens collected by Shankin, an officer employed by the Russian government in surveying the province; and of the former, the plate that accompanies this article is a representation. It was taken from a plant that flowered in August 1828, in the Garden of the Horticultural Society, where it had been raised from seed sent home by Sir Henry Willock.

The Persian plant differs in some respects from the Songarese one, especially in being more glaucous; and the plants raised from the Persian seeds of Mr. Willock varied among each other in several slight particulars, — none of which, however, were of any interest in a Botanical point of view.

The two most important topics connected with it relate, firstly, to its genus, and, secondly, to its cultivation. In the latter respect no more appears to be known now than was known upon its first introduction. It resists cultivation in a remarkable manner, submitting permanently neither to budding, nor grafting, nor laying, nor striking from cuttings; nor, in short, to any of those operations, one or other of which succeed with other plants. Drought does not suit it, it does not thrive in wet; heat has no beneficial effect, cold no prejudicial influence; care does not improve it, neglect does not injure it. Of all the numerous seedlings that were raised by the Horticultural Society from Mr. Willock's seeds, and distributed, scarcely a plant remains alive. Two are still growing in a peat border in the Chiswick Garden; but they are languishing and unhealthy; and we confess, that observation of them in a living state for nearly four years has not suggested a single method of improving the cultivation of the species.

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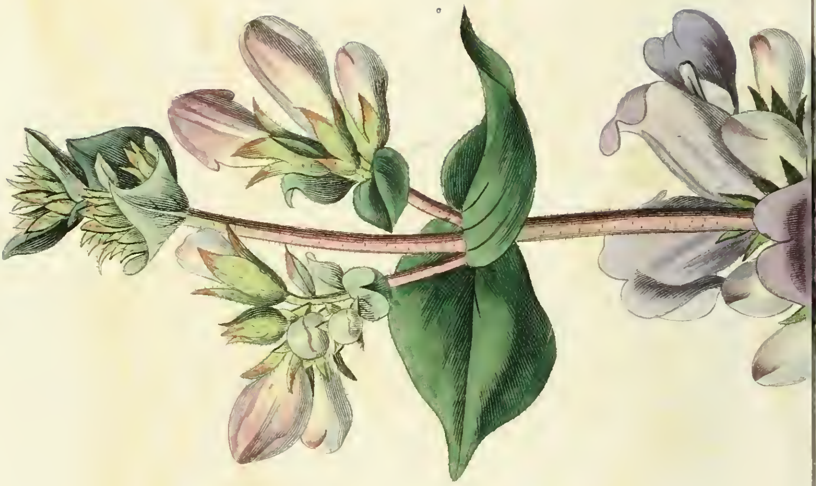
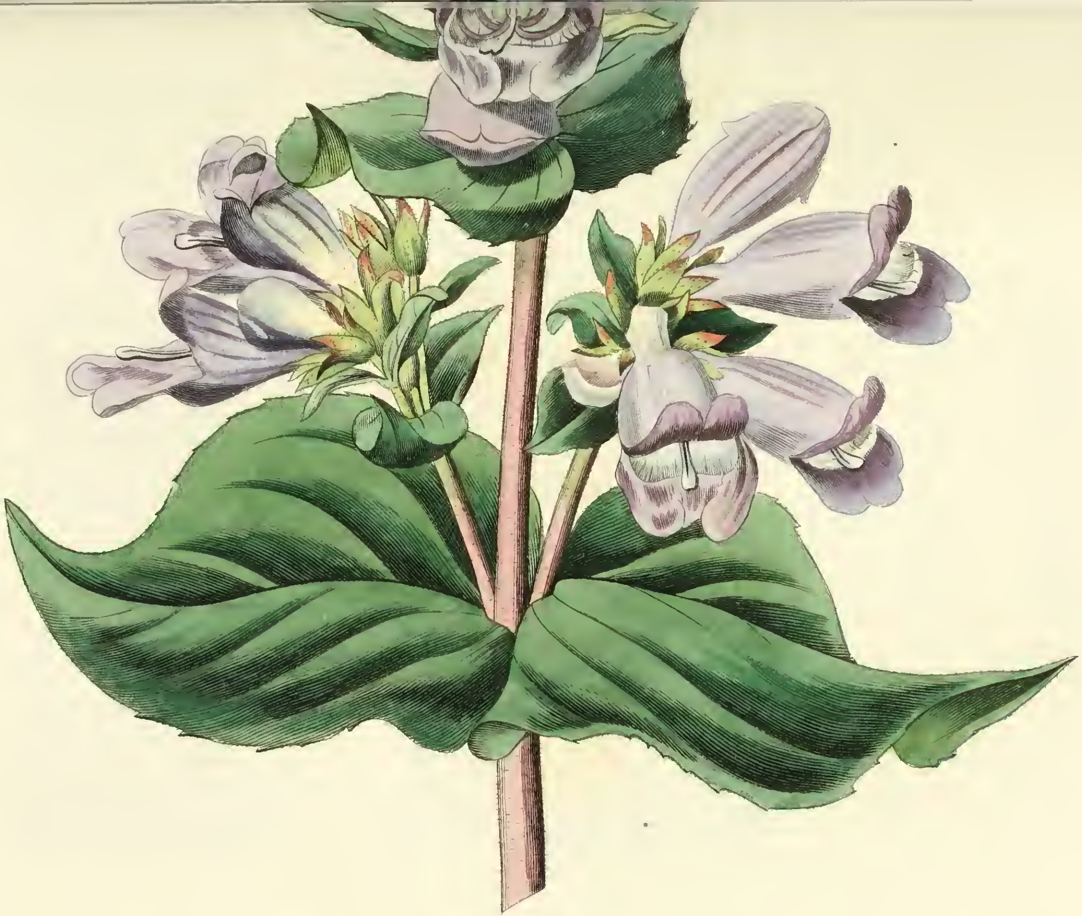
* Named in compliment to the Rev. Mr. Lowe, travelling Bachelor of the University of Cambridge; a gentleman now resident in Madeira, from whose Botanical investigations of that island we expect important results.

As to its genus, it is well known, that since the days of Linnæus the characters of the genera of flowering plants have been exclusively taken from the organs of fructification, while those of vegetation have been rigorously excluded. This has arisen from the former having been supposed in all cases more constant in their modifications, and less subject to variation, than the latter. No other reason can be assigned for the value thus exclusively ascribed to the organs of fructification. It is, however, time that Botanists should disembarrass themselves of this ancient prejudice, and admit publicly that by which they are constantly influenced in private — *that important modifications of the organs of vegetation are sufficient to divide into genera, species which do not essentially differ in the organs of fructification.*

Of this the Indian Cypripediums are one instance, the genus Negundium is another, and the subject of this article is a third. The structure of its flower is in every respect that of a Rose; but its foliage is not even that of a Rosaceous plant, there being no trace of stipulæ. The simple leaves are not analogous to the terminal pinna of a rose-leaf, for there is no trace of the articulation upon their petiole, which is required to indicate a reduction of a compound leaf, as we find in Berberis; neither can they be considered confluent stipulæ, for their venation is not what would be found under such circumstances, but precisely that of an ordinary leaf.

J. L.





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PENTSTÉMON* glandulósum.

Glandular Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ.
PENTSTEMON. — *Suprà, vol.* 13. *fol.* 1121.

P. *glandulosum;* glanduloso-pubescens, foliis radicalibus ovatis grossè dentatis, caulinis amplexicaulibus acutis subintegerrimis, sepalis capsulæ glabræ subæqualibus, corollis ventricosis, rudimento glabro.

P. glandulosum. *Douglas in herb. Hort. Soc.*

Perenne; undique, capsulâ salvâ, pilis brevibus, mollibus, glandulosis obsitum. Caulis *strictus, bipedalis v. ultrà, teres.* Folia *radicalia ovata, breviter petiolata, grossè dentata; caulina cordato-ovata, acuta, amplexicaulia, inferioribus paululùm dentatis, superioribus integerrimis.* Flores *terminales et axillares, racemoso-paniculati;* umbellulis *pedunculatis, sæpiùs trifloris, foliis longiores, basi bracteatis.* Calyx *laxus, laciniis ovatis, capsulæ maturæ æqualibus.* Corolla *magna, ventricosa, Digitalis instar, pallidè rosea, intùs purpureo vittata;* fauce *subcompressâ;* limbo *bilabiato, labio superiore bilobo, lobis conniventibus, inferiore tripartito, majore laciniis lateralibus incurvis super mediam subincumbentibus.* Antheræ *albæ, ciliatæ.* Rudimentum *rectum, glabrum, spatulatum.* Capsula *ovata, glabra.* Semina *angulata.*

Of the various discoveries that have resulted from the journey of Mr. Douglas to the north-west coast of America, the new species of Lupinus and Pentstemon will probably be found the most interesting to the cultivator, in consequence of the great beauty and variety of their forms, and their hardy habits. Natives of a country, the mean temperature of which is supposed to be very like that of Great Britain, they seem as well adapted to our climate as to their own, and flourish as gaily on the fertile margin

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* See fol. 1245.

of the Thames as on the rude banks of the Columbia and Multnomah.

We are informed by Mr. Douglas, that " this handsome and strongly marked species, in its native country is not so plentiful as many others. In the dry, gravelly, or rocky channels of mountain torrents in the Rocky Mountains, lat. 47° north, and at the base of the Blue Mountains on the banks of the Kooskooskee river, 6300 feet above the level of the sea, it occurs frequently."

Introduced in 1827. It flowered in the Garden of the Horticultural Society for the first time in June 1829, where our drawing was made.

It is a hardy perennial, increased by seeds, or division of its roots.

The following list of the Pentstemons that have been found by Mr. Douglas, and which are now growing in the Garden of the Horticultural Society, will shew the extent to which our Gardens have been enriched with them.

P. glandulosum. *Fol.* 1262.
triphyllum. *Suprà, fol.* 1245.
confertum. *Suprà, fol.* 1260.
diffusum. *Suprà, fol.* 1132.
Richardsonii. *Suprà, fol.* 1121.
Scouleri.
ovatum.
speciosum.
acuminatum.
venustum.
pruinosum.
deustum.
attenuatum.

" Whole plant clothed with fine, soft, silky, glandular hairs. *Stem* erect, two and a half to three feet high, round, of a reddish rusty colour where exposed to the sun, greenish above. *Radical leaves* ovate, on short footstalks, soft, and nearly veinless, widely and coarsely toothed ; *cauline leaves* amplexicaul, ovate, acute, broader at the base and more finely toothed than the radical leaves. *Flowers* in a very long, terminal, densely clustered panicle, rose, with dark purple streaks in the inside. *Bracteas* cordate, entire. *Peduncles* erect. *Pedicels* mostly

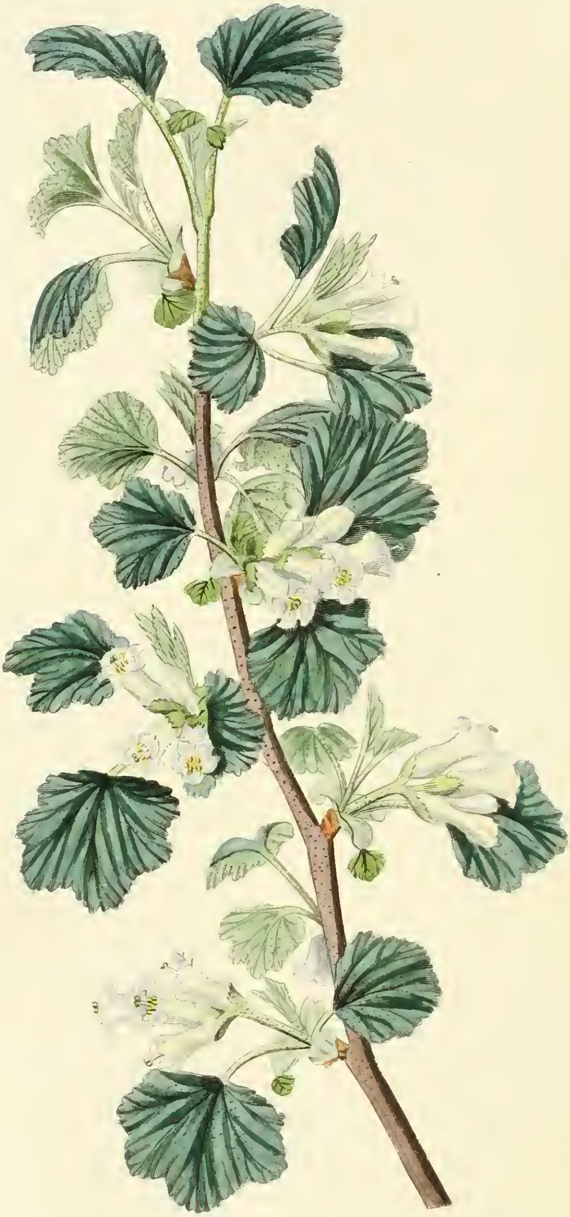
5 or 7, together. *Segments of the calyx* broadly ovate, very large, linear, somewhat longer than the perfect capsule, slightly contracted about the tube of the corolla. *Corolla* covered on the outside with a short, glandular, viscid pubescence. *Tube* contracted, channelled on the upper side. *Faux* ventricose, slightly flattened at the mouth. *Limb* 2-lipped; upper lip bifid, with smaller revolute laciniæ; under lip trifid, with larger laciniæ. *Filaments* curved. *Anthers* kidney-shaped before expansion, white, valves ciliated. *Rudiment* longer than the fertile filaments, straight, white, naked and flattened or spatulate at the apex. *Capsule* large. *Seeds* numerous and angular."—*Douglas*.

J. L.

NOTE.

In describing *Buddlea heterophylla*, fol. 1259, we overlooked the B. madagascariensis of the *Botanical Magazine*, t. 2824, which is evidently the same plant. But while we indicate the synonym, we remain of our first opinion, that the species is an undescribed one: B. madagascariensis of Lamarck and Vahl is described with 4-cornered branches, and leaves smooth and shining above; while B. heterophylla has taper branches, and leaves downy above. It is undoubtedly true, that the lower leaves of B. heterophylla become smooth; but neither Lamarck nor Vahl appear to have seen them, or they would have noticed the remarkable difference in form that exists between the upper and lower leaves.

1263.



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RÍBES* cereum.

Waxy Currant.

PENTANDRIA *MONOGYNIA.*

Nat. ord. GROSSULACEÆ.
RIBES. — *Suprà, vol.* 2. *fol.* 125.

R. *cereum;* inerme, foliis subrotundis crenatis sublobatis glanduloso-pubescentibus basi truncatis integerrimis, racemis cernuis pedunculatis paucifloris umbellatis, bracteis ovatis tomentosis, calycibus tubulosis coloratis pubescentibus.

R. cereum. *Douglas in herb. Hort. Soc.*

Frutex *humilis, undique rore cereo pruinosus.* Rami *inermes, cortice fusco deglubente.* Folia *petiolata, subrotunda, crenata, pubescentia, adultis glabris lobatis; petioli pubescentes.* Flores *albi, in racemis cernuis,* 4-5-*floris, umbellatis, pedicello glanduloso insidentibus dispositi; bracteæ ovatæ, tomentosæ, apice dentatæ, ovariis longiores.* Calyx *tubulosus, cylindraceus, ovario duplò longior, pubescens, glandulosus.* Stylus *inclusus.* Baccæ *parvæ, sphæricæ, glabræ, calyce longo coronatæ.*

A small hardy shrub, native of dry rocks on the north-west of North America, from the great falls of the Columbia to the Rocky Mountains, where it was discovered by Mr. Douglas. It flowered for the first time in April of the present year, in the Garden of the Horticultural Society, where our drawing was made.

The cultivated plant agrees entirely with the native specimens brought home by Mr. Douglas. It is one of the most distinctly marked of the genus.

Branches unarmed, with the old bark peeling off; when young covered, as all the rest of the plant, with a white waxy exudation. *Leaves* stalked, roundish, crenate, pubescent, when full-grown smooth and lobed; petioles downy.

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[*] See fol. 1237.

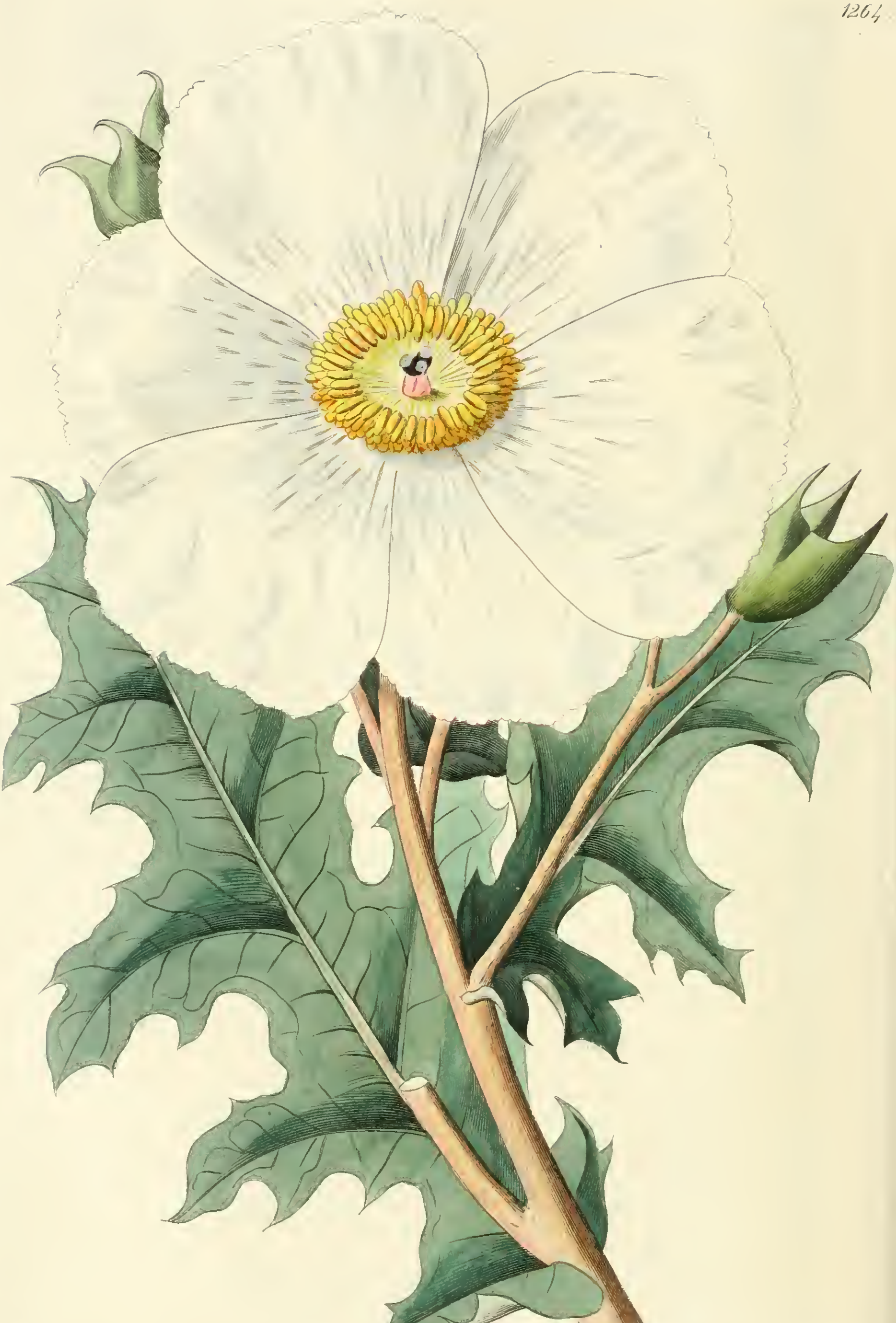
Flowers white, arranged in cernuous, 4-5-flowered, umbelled racemes, which are seated upon a glandular peduncle; bracteæ ovate, downy, toothed at the end, longer than the ovaries. *Calyx* tubular, cylindrical, twice as long as the ovarium, pubescent and glandular. *Berries* small, round, smooth, crowned by the long calyx.

J. L.

NOTE.

We are informed by Mr. Otto, that the Gesneria macrostachya of fol. 1202 of this work had been previously published in the *Transactions of the Prussian Horticultural Society*, under the name of G. *latifolia* of Martius.

1264



Hart del. Pub by J. Ridgway 169 Piccadilly Sep. 1. 1829. Watts sc.

ARGEMÓNE* grandiflóra.

Large-flowered Mexican Poppy.

POLYANDRIA *MONOGYNIA.*

Nat. ord. PAPAVERACEÆ.

ARGEMONE Linn.—*Sepala* 2-3 concava, mucrone superata, pilis aculeiformibus aspera. *Petala* 4-6. *Stamina* 00. *Ovarium* ovatum, stigmatibus 4-7, radiantibus persistentibus concavis liberis (nec super discum sessilibus) coronatum. *Capsula* ovata, 1-locularis, valvulis apice dehiscens, placentis linearibus. *Semina* sphærica, strophiolata.—— Herba *annua, succo flavescente donata, in caule, foliis, et calyce pilis rigidis subaculeata.* Folia *sessilia penninervia, repando-sinuata, sinubus dentato-spinulosis, sæpè albo maculata aut picta.* Pedunculi *axillares, semper erecti, nec ante anthesin inflexo-cernui.* Flores *flavi aut albi.*—Dec. syst. 2. 85.

A. *grandiflora ;* foliis oblongis pinnatifidis planis pauci-dentatis, calycibus inermibus.

A. grandiflora. *Hort. angl.*

Caulis *erectus, teres, glaber, pallidè viridis, undique striis acicularibus, purpureis notatus.* Folia *oblonga, pinnatifida, medio maculata, paucidentata.* Flores *terminales, subterni, matutini, bibracteolati.* Calyx *caducus, tricornis, triphyllus, pallidè viridis, inermis.* Petala *magna, alba, membranacea, subplicata, sex, duplici serie.* Stamina *plurima, brevia, hypogyna, antheris basi insertis, apice gyratis.* Ovarium 1-*loculare, placentis* 4 *parietalibus polyspermis.* Stigmata 4, *lunata, incurva, sessilia* (*incuriâ pictoris tria in icone*).

This is one of the multitude of fine plants with which our Gardens have been enriched by the importations of Robert Barclay, Esq. of Bury Hill. It is one of the most ornamental hardy annuals we are acquainted with, and far superior to any other of the Poppy tribe, except Eschscholtzia californica.

A native of Mexico, flowering from June to September.

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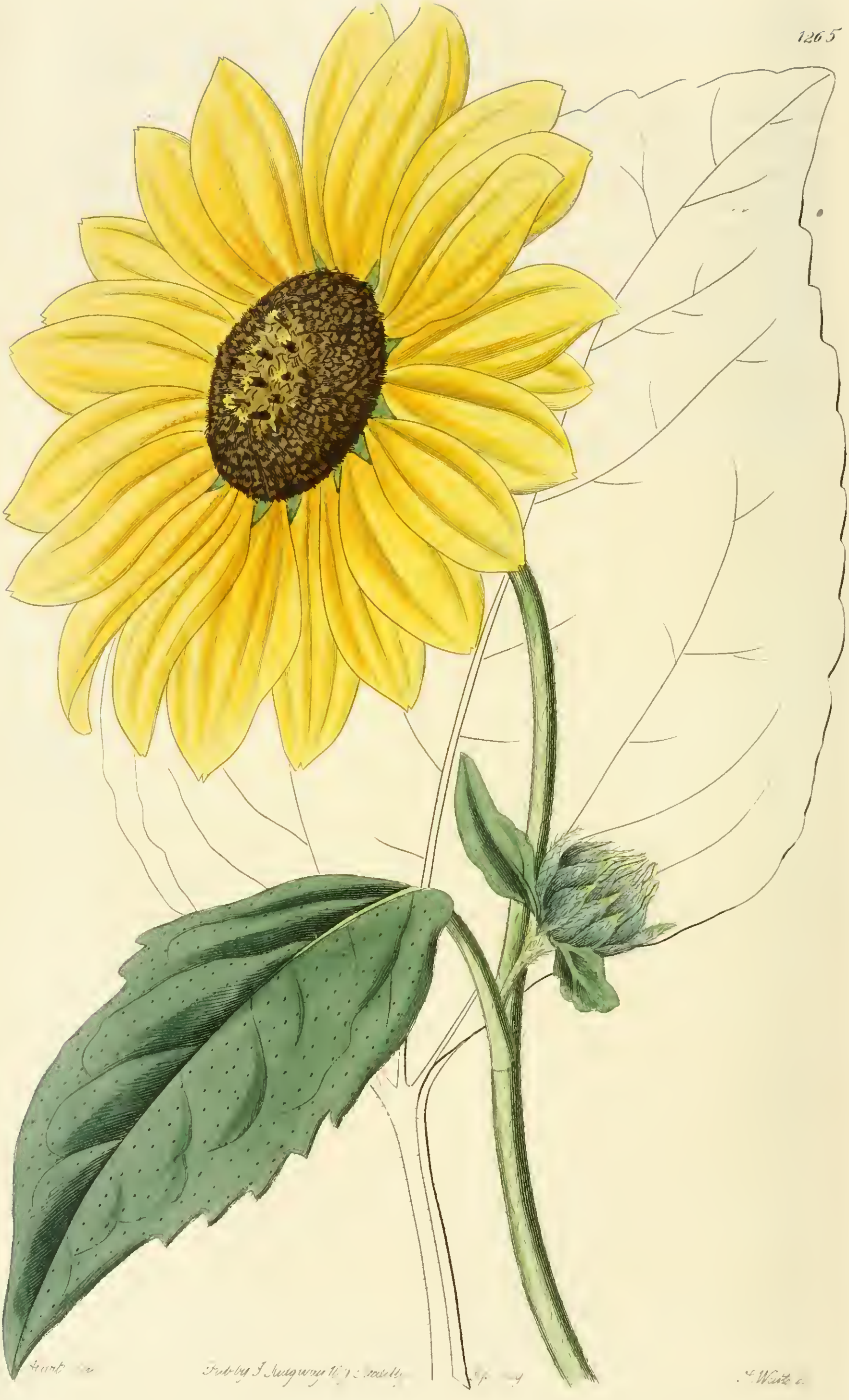
* So called from *argema*, or a cataract of the eye, which it has been thought to cure.

Our drawing was made from specimens communicated by Mr. Barclay, in August 1827.

Stem erect, taper, smooth, pale green, marked all over with fine purple streaks, like what would be produced by the point of a needle. *Leaves* oblong, pinnatifid, spotted with white in the middle, few-toothed. *Flowers* terminal, usually growing in threes, opening in the morning, each with two small bracteæ. *Calyx* deciduous, 3-horned, 3-leaved, pale green, unarmed. *Petals* large, white, membranous, somewhat plaited, consisting of 6, in two rows. *Stamens* numerous, short, hypogynous; anthers inserted by their base, rolled up at their apex. *Ovarium* 1-celled, with 4 parietal polyspermous placentas. *Stigmas* 4, lunate, incurved, sessile (not 3, as is inaccurately represented in the figure).

J. L.

1265



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1265

HELIÁNTHUS* lenticuláris.

Californian Sun-flower.

SYNGENESIA *POLYGAMIA FRUSTRANEA.*

Nat. ord. COMPOSITÆ. § *Corymbiferæ.*
HELIANTHUS.— Suprà, vol. 6. *fol.* 508.

H. *lenticularis;* annuus, foliis ovatis acuminatis grossè serratis hispidis tripliveniis, pedunculis monocephalis æqualibus.

H. lenticularis. *Douglas in herb. Hort. Soc.*

Annuus. Caulis *erectus, orgyalis v. ultrà, hispidus.* Folia *ovata, longè petiolata, grossè serrata, hispida, triplivenia.* Capitula *pedunculo hispido insidentia, basi bibracteata.* Involucrum *squarrosum, planum, foliolis ovatis, cuspidatis, hispidis.* Flosculi radii 36, *acuminati.* Paleæ *tridentatæ, flosculis disci paulò breviores.* Flosculi disci *limbo intùs atropurpureo, extùs luteo.* Pappus *bicornis.*

This species of annual Sun-flower is nearly related to H. tubæformis, from which, according to Mr. Douglas, it differs in not having the leaves cordate at the base, or the peduncle fistular and thickened. It is a handsome plant, growing in the Gardens 6 feet high, with much smaller flowers than those of H. annuus. It was introduced by Mr. Douglas from North-west America in 1827. Our drawing was made in the Garden of the Horticultural Society, in August 1828.

We are informed by its discoverer that it is a variable plant, abounding over the greater part of the temperate countries situated in the interior and western coast of North America. In sandy parched ground it is a diminutive annual, scarcely a foot high; while on the banks of

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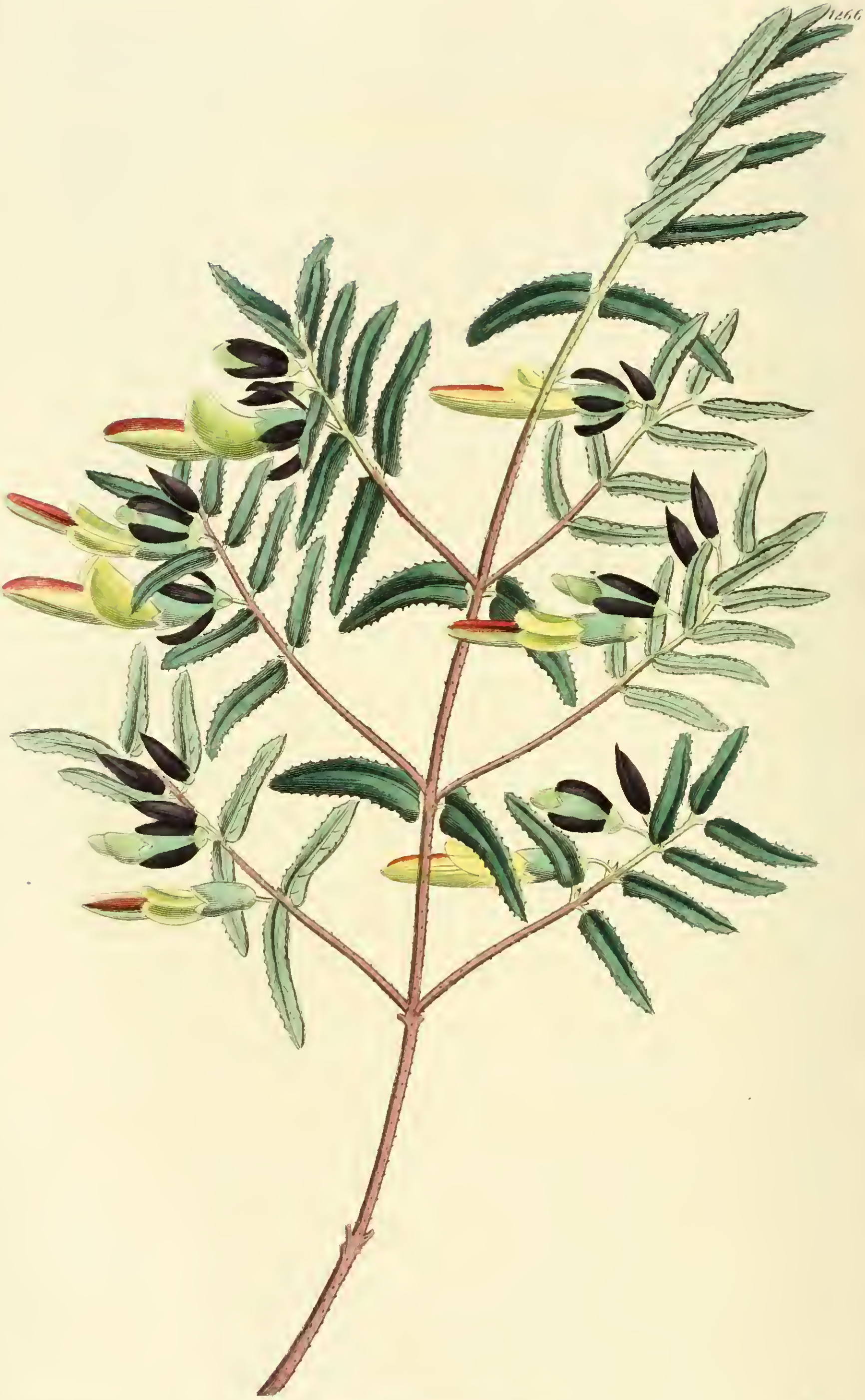
[*] From ἥλιος, the sun, and ἄνθος, a flower; in allusion to the singular phenomenon of the flowers of this genus turning to the sun in the morning, and following him through his course in the day.

streams, or on the margin of lakes, particularly in deer or buffalo ground, it attains the height of 6 or 8 feet.

The native tribes that inhabit the interior of North California apply the grains to the same purpose as that for which we are informed by Nuttall the Indians of the Missouri use H. tubæformis. They collect them in the autumn, and dry them on heated stones, or in wooden troughs with small embers, stirring them with a stick to prevent their burning. When dried, they are pounded and made into a sort of cake which is not unpleasant.

Stem erect, as high as a man or higher, hispid. *Leaves* ovate, on long stalks, coarsely serrated, hispid, triple-veined. *Heads* placed upon a hispid peduncle, with two leafy bracteæ at their base. *Involucrum* squarrose, flat, the leaflets ovate, cuspidate, hispid. *Florets of the ray* 36, acuminate. *Paleæ* 3-toothed, rather shorter than the florets of the disk; these dark purple in the inside of their limb, yellow on the outside. *Pappus* 2-horned.

J. L.


1266
Watts

SCÓTTIA* angustifólia.

Narrow-leaved Scottia.

DECANDRIA *MONOGYNIA.*

Nat. ord. LEGUMINOSÆ. § *Loteæ.*
SCOTTIA.—Suprà, vol. 15. *fol.* 1233.

S. *angustifolia;* foliis lineari-oblongis basi truncatis.

Frutex *virgatus, ramulis verrucoso-exasperatis, filiformibus.* Folia *lineari-oblonga, basi truncata, glabra, revoluta, inæqualiter denticulata, subsessilia.* Flores *solitarii, axillares, omninò* S. dentatæ, *sed paulò minores.*

For this beautiful addition to an interesting genus, the public is indebted to Mr. Mackay, of the Clapton Nursery, by whom it was raised from New Holland seeds.

Rather a prettier plant than S. dentata, figured at fol. 1233 of this work, from which it differs principally in the outline of its leaves. Like that species, it is a hardy greenhouse plant, and worthy of a place in every good collection.

A twiggy shrub, with rough, minutely warted, filiform branchlets. *Leaves* linear-oblong, truncate at the base, smooth, with a toothletted, revolute margin, nearly sessile. *Flowers* solitary, axillary, quite those of S. dentata, but rather smaller.

Our drawing was made at the Clapton Nursery, in January of the present year.

J. L.

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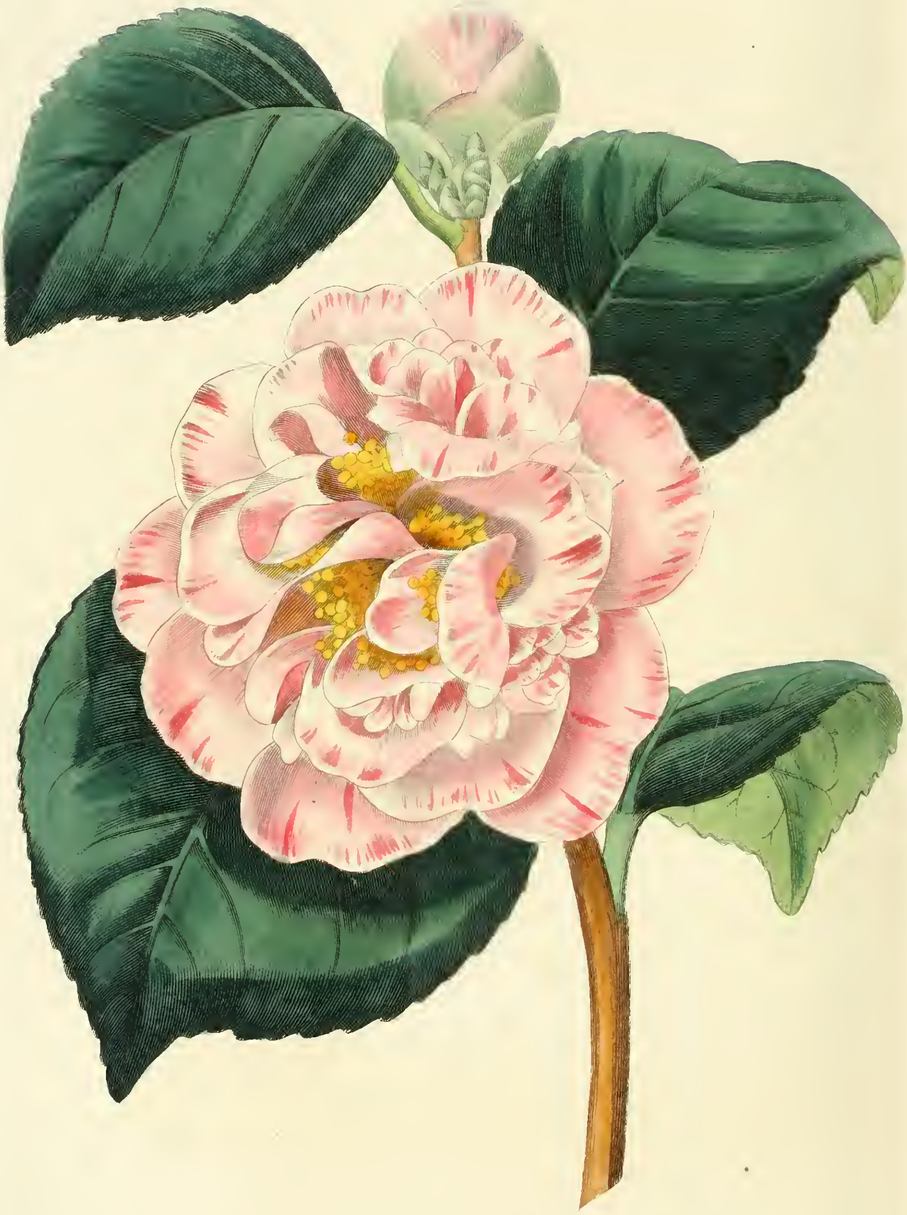
* See fol. 1233.

1267



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CAMELLIA* japonica punctata.

Gray's Invincible Camellia.

MONADELPHIA *MONOGYNIA.*

Nat. ord. TERNSTRÖMIACEÆ.
CAMELLIA. — *Suprà, vol.* 1. *fol.* 22.

Camellia japonica. *Vide suprà, vol.* 1. *fol.* 22.
V. Petalis subcarneis rubro maculatis punctatisque, interioribus contortis, staminibus interjectis.

" The variety of Camellia japonica here represented was raised in 1824 by Mr. George Press, Gardener to Edward Gray, Esq., F.H.S., Harringay House, Hornsey, from seed of the semidouble red, impregnated with the pollen of the single white; to the latter of which it has considerable resemblance both in its growth and habit.

" The *leaves* are thick, smooth, and of a dark shining green colour, usually about 3½ inches long, and 2 inches broad, convex, and nearly oval, with moderately large serratures, and a sharp recurved point. They are seldom undulated like the leaves of the single white, but have similar prominent veins, and a strong, pale green midrib. *Petiole* about ¾ths of an inch long, a little flattened above, otherwise quite round, and of the same colour as the midrib and veins.

" *Flower-buds* large, roundish oval, covered with 7 or 8 roundish concave, densely pubescent, yellowish green scales, slightly tinged with pale red at their edges. The *flowers* when fully expanded vary from 3 to 4 inches in

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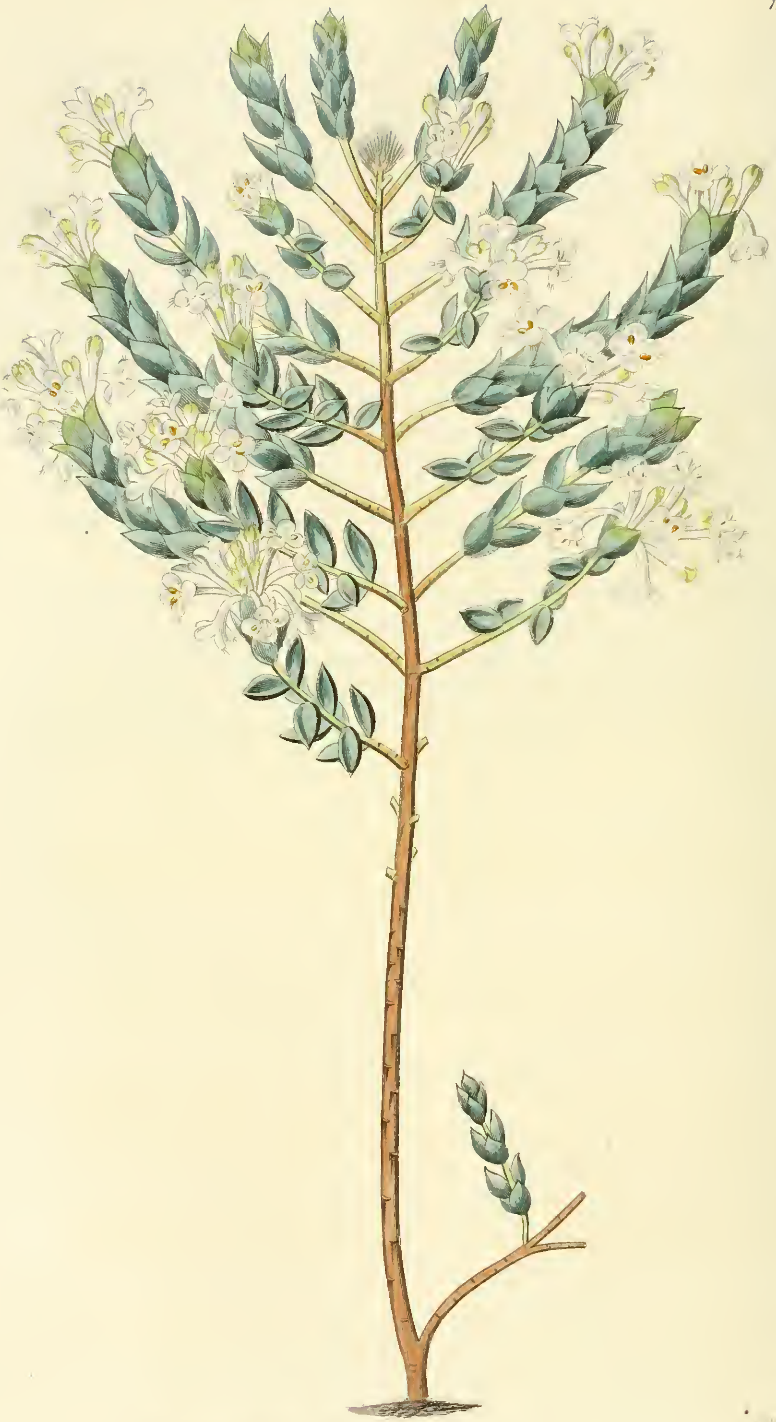
[*] This genus is named in commemoration of the services rendered to the Botany of his time by Father Kamel, a Moravian Jesuit, and traveller in Asia. He flourished at the end of the seventeenth century.

diameter, and are of a very delicate blush colour, almost white; striped, and slightly spotted with pale rose, in the manner of what is known by Florists as a rose flake carnation. The exterior petals are nearly round, or but a very little cordate, and spread almost flat; each of them is upwards of an inch in diameter. The interior petals are numerous, and of an irregular shape, some of them being comparatively large, and roundish, often a little compressed and undulated; others are small, narrow, pointed, and incurved. They do not lie flat over one another, but are loosely arranged in a cluster, similar to the petals in the centre of the flower of the Pompone Camellia represented at fol. 22 of this work, although not so upright or compact. In some of the flowers, a few parcels of stamina may be sometimes observed; but they are for the most part all transformed into small narrow petals."

For the above account of this plant we are obliged to Mr. W. B. Booth, of the Horticultural Society's Garden, who has studied the varieties of Camellia more attentively than any other person, and who, in conjunction with Mr. Chandler, jun., is preparing a fine illustrated work upon the subject, which we have no doubt will do both the authors credit.

J. L.

1268



1268

PIMELÉA* húmilis.

Lowly Pimelea.

DIANDRIA *MONOGYNIA.*

Nat. ord. THYMELÆÆ.

PIMELEA Banks et Solander. — *Perianthium* infundibuliforme, limbo 4-fido, fauce esquamatâ. *Stamina* duo fauci inserta, laciniis exterioribus opposita. *Stylus* lateralis. *Stigma* capitatum. *Nux* corticata, raró baccata. —— Frutices. Folia *opposita, raró alterna.* Flores *capitati, terminales,* foliis *involucrantibus, sæpè dissimilibus, interdùm connatis, rariùs spicati v. axillares, quandoque dioici.* Perianthii *tubus in plerisque medio articulatus, articulo inferiore persistente.* — R. Brown prodr. 1. 359.

§ 2. *Folia opposita. Capitulum terminale. Folia floralia rameis subsimilia.*

P. *humilis;* foliis utrinque glabris oblongis obtusis; floralibus ovalibus intùs villosiusculis, perianthiis sericeis, caule erecto subsimplici, ramis pubescentibus. *R. Brown l. c. Römer et Schultes,* 1. 274. *Spreng. syst.* 1. 92.

Frutex *humilis, ramulis simplicibus, erectis.* Folia *imbricata, ovato-oblonga, subtùs convexa, glauca, glabra.* Involucri foliola *conformia, intùs sericea, margine ciliata.* Flores *pauci,* 8-10, *sericei, basi glabri.* Stamina *brevia.*

Our drawing of this was made at the Comte de Vandes' in June 1828.

A low greenhouse shrub, native of New Holland, whence it has been introduced within a few years. Like the rest of its genus, it is cultivated without any difficulty in peat and loam, and propagates readily by cuttings.

We refer this to P. humilis, solely by Mr. Brown's brief diagnosis, with which it agrees tolerably well; not having seen any authentic specimen: in some respects it approaches P. glauca, especially as that species is figured by Mrs. Rudge in the *Linnæan Transactions;* but the subject of the present article is not referable to the same section as the true P. glauca of Mr. Brown.

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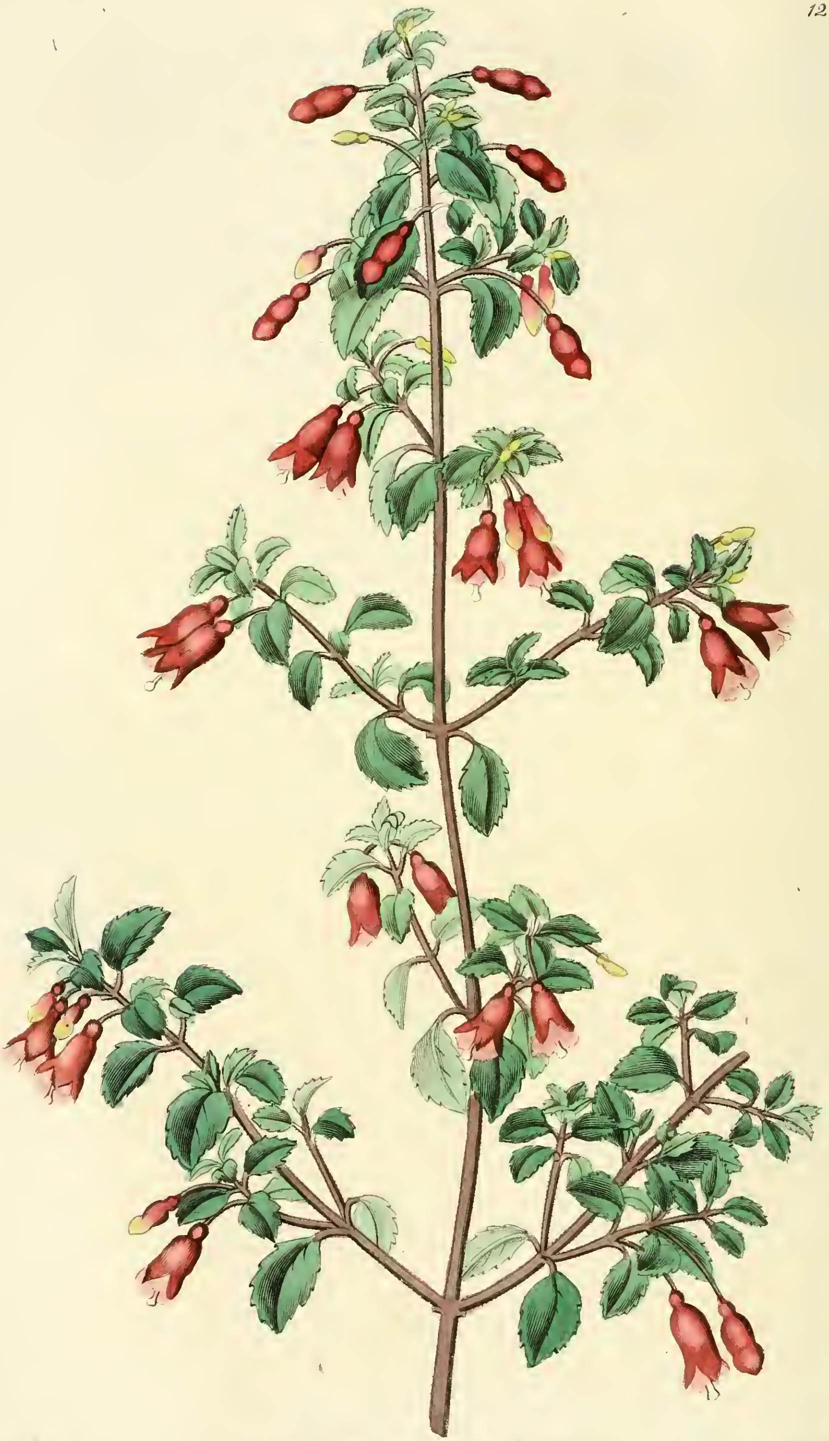
* A name said to be derived from πιμελὴ, fat; for the application of which there seems to be no intelligible reason.

A low shrub, with simple, erect *branches. Leaves* imbricated, ovate-oblong, convex beneath, glaucous, smooth. *Leaflets of the involucrum* of the same form as the rest, silky within, and ciliated at the margin. *Flowers* few, 8-10, silky, naked at the base. *Stamens* short.

J. L.

1269.



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1269

FÚCHSIA* microphýlla.

Small-leaved Fuchsia.

OCTANDRIA *MONOGYNIA.*

Nat. ord. ONAGRARIÆ.
FUCHSIA. — *Suprà, vol.* 10. *fol.* 847.

F. *microphylla;* ramulis pubescentibus, foliis petiolatis ovatis denticulatis utrinque glabris, floribus solitariis axillaribus foliis paulò longioribus, calycis tubo campanulato: laciniis erectis, petalis dentatis, retusis, staminibus inclusis, stigmate 4-partito.

F. microphylla. *Humb. Bonpl. et Kunth. n. g. et sp.* 6. 103. *t.* 534. *Decand. prodr.* 3. 36.

Frutex *dumosus, densè foliosus.* Ramuli *pubescentes, teretes.* Folia *petiolata, ovata, glaberrima, denticulata, acuta, v. obtusa.* Flores *solitarii, axillares, penduli, pedunculis pubescentibus.* Ovarium *atropurpureum, globosum.* Calyx *campanulatus, purpureo-roseus, limbo erecto, tubo breviore, laciniis ovatis, acutis.* Petala *atrorosea, retusa, bi- tri-dentata, calycis laciniarum longitudine.* Stamina *inclusa serie duplici,* 4 *petalis alternis et in eodem verticillo,* 4 *ad bases petalorum.* Stigma 4-*partitum.*

A native of the volcanic mountain Jorullo, in Mexico, where it was found growing by Messrs. Humboldt and

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* Leonhard Fuchs was a Bavarian Botanist and Physician, born at Wembdingen in 1501, and died in 1566. He is best known for his *Historia Stirpium,* a work filled with figures of plants in outline, cut upon wood, which were excellent for their time, and had the merit of being the first that were executed of the natural size. The original edition of this remarkable work was published at Basle, in folio, in 1542; an octavo edition appeared at Leyden in 1549; one French translation was published at Paris, in folio, in the same year; another at Lyons the year before; and an octavo Spanish version was brought out at Antwerp in 1557. The learned Sprengel speaks thus of Fuchsius: — "Vatiniano odio prosequutus Arabes, quos impias bestias vocat, ad Græcos fontes ubique ablegat; acerrimè reprehendit recentiores qui, summo rei medicæ damno, plantarum veterum nomina traduxerint ad Germanicas plantas:" and thus of his work, "Eo potissimùm fine edidit, ut ad vulgatissimas Germaniæ australis plantas Botanicorum studia converteret, atque icones daret, non sumtuosas, sed fidissimas, umbris partium solis expressis, in quo consilio ita adjutus fuit à Rod. Specklin, Argentinensi, ut ipsæ etiam partes essentiales non negligerentur."

Bonpland at the height of between 3 and 4000 feet above the level of the sea. It has been recently raised in this country by R. Barclay, Esq. of Bury Hill, and Mr. Mackay of the Clapton Nursery. Our drawing was made at Mr. Mackay's; and we are indebted to Mr. Barclay for fine specimens.

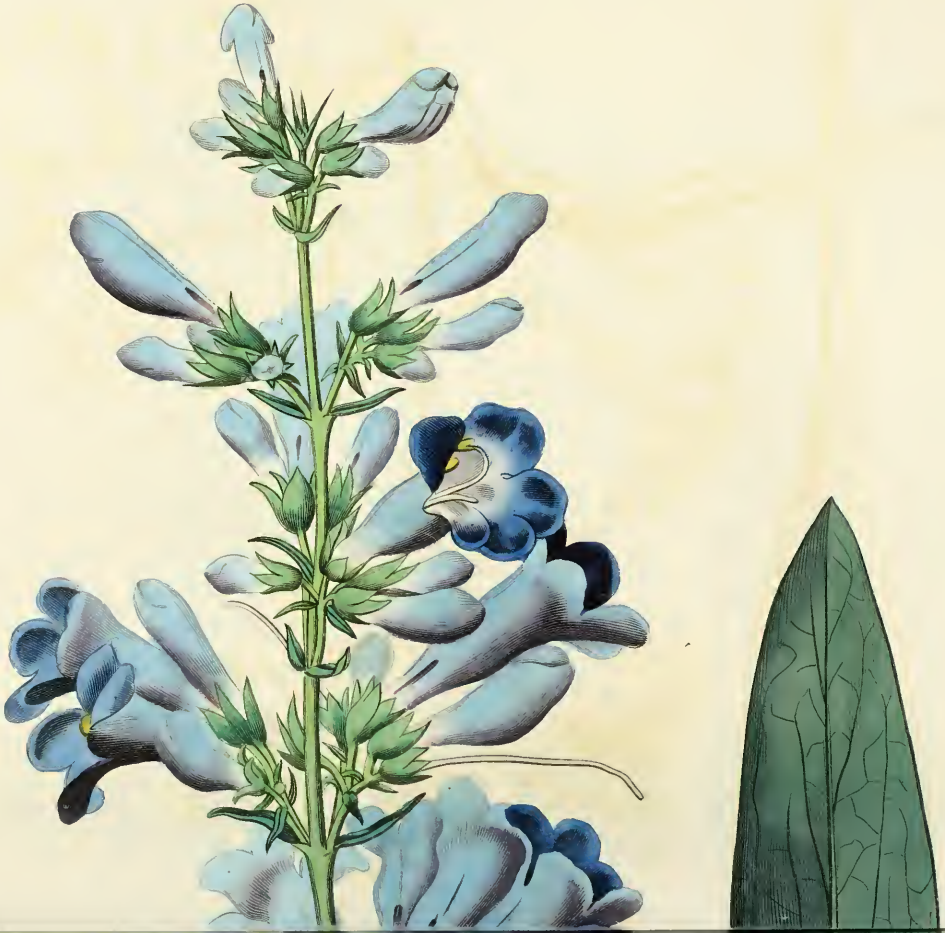
As a garden plant, this is in our estimation by far the most interesting species in cultivation; destitute indeed of the glaring colour and nodding flowers of F. gracilis and coccinea, but possessing a rich deep green foliage, among which the little glowing, ruby-coloured flowers are crowded in the greatest profusion.

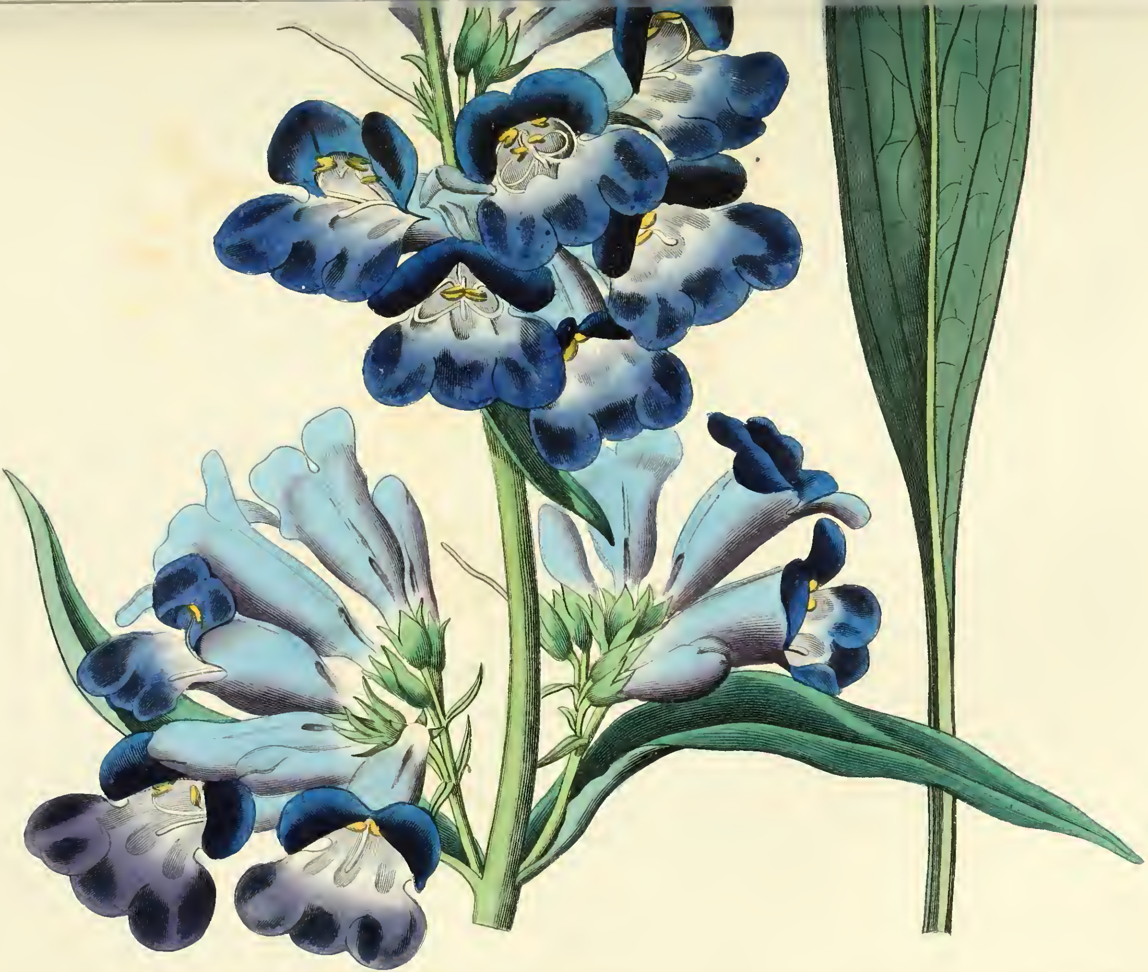
Like all the species hitherto known, it is strictly a greenhouse plant: it will thrive out of doors in a warm summer, but it cannot bear much frost; and must, to be kept in health and beauty, be nursed in the winter as other greenhouse plants are. It increases rapidly by cuttings, and will soon be as common as the other kinds.

A small densely leafy *shrub*. *Twigs* pubescent, taper. *Leaves* stalked, ovate, quite smooth, toothletted, acute, or obtuse. *Flowers* solitary, axillary, pendulous, with pubescent peduncles. *Ovarium* dark purple, globose. *Calyx* campanulate, a deep rich ruby red; its limb erect, shorter than the tube, its segments ovate, acute. *Petals* deep rose, retuse, 2- or 3-toothed, the length of the segments of the calyx. *Stamens* included in a double row, 4 alternate with the petals, and in the same whorl; 4 at the bases of the petals. *Stigma* 4-parted.

J. L.

1270.





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PENTSTÉMON* speciósum.

Shewy Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ.
PENTSTEMON. — *Suprà, vol.* 13. *fol.* 1121.

P. *speciosum;* glaucum, glabrum, foliis integerrimis; radicalibus spatulatis; caulinis lanceolatis subundulatis sessilibus, floribus verticillatim paniculatis, corollæ lobis subæqualibus rotundatis, rudimento glaberrimo.

P. speciosum. *Douglas in herb. Hort. Soc.*

Herba *perennis, glauca, glaberrima.* Folia *radicalia spatulato-lanceolata, integerrima; caulina angusta, sessilia, subcomplicata, undulata, acuminata.* Caulis *erectus, 2-3-pedalis.* Flores *speciosissimi, dispositi in cymis multifloris axillaribus, spicatim ad fastigium caulis ordinatis.* Sepala *5, æqualia, imbricata, ovata, marginata, cuspidata.* Corolla *unciam longa, cælestina in rubro versicolor, tubo inflato, limbo 2-labiato, lobis rotundatis, subæqualibus, palato prominente, glabro.* Stamina *fertilia et* rudimentum *glaberrima.* Ovarium *ovato-cylindraceum.* Stylus *purpureus, filiformis, glaber.* Stigma *simplex.*

A fine perennial species, native of the banks of the Spokan river, in North-west America, whence it was sent by Mr. Douglas to the Horticultural Society in 1827. It flowered in the Chiswick Garden from June to September: our drawing was made in July.

In consequence of the great number of flowering stems and flowers which this plant produces, it increases little by the root, so that its propagation will depend upon the saving its seeds, which are brought forth in abundance.

It is quite hardy, and grows in common garden soil.

A *perennial,* glaucous, very smooth plant. Radical *leaves* spatulate, lanceolate, quite entire, the cauline narrow, sessile, somewhat folded together, undulate, acuminate. *Stems* erect, 2 or 3 feet high. *Flowers* very shewy, in axillary, many-flowered cymes, arranged in a spicate manner at the summit of the stem. *Sepals* 5, equal, imbricated, ovate, edged with a membrane, terminating in an abrupt point. *Corolla* about an inch long, sky blue, varying to red; the tube inflated, the limb 2-lipped, its lobes rounded, nearly equal, the palate prominent, smooth. The fertile *stamens* and the *rudiment* perfectly smooth. *Ovarium* ovate, cylindrical. *Style* purple, filiform, smooth. *Stigma* simple.

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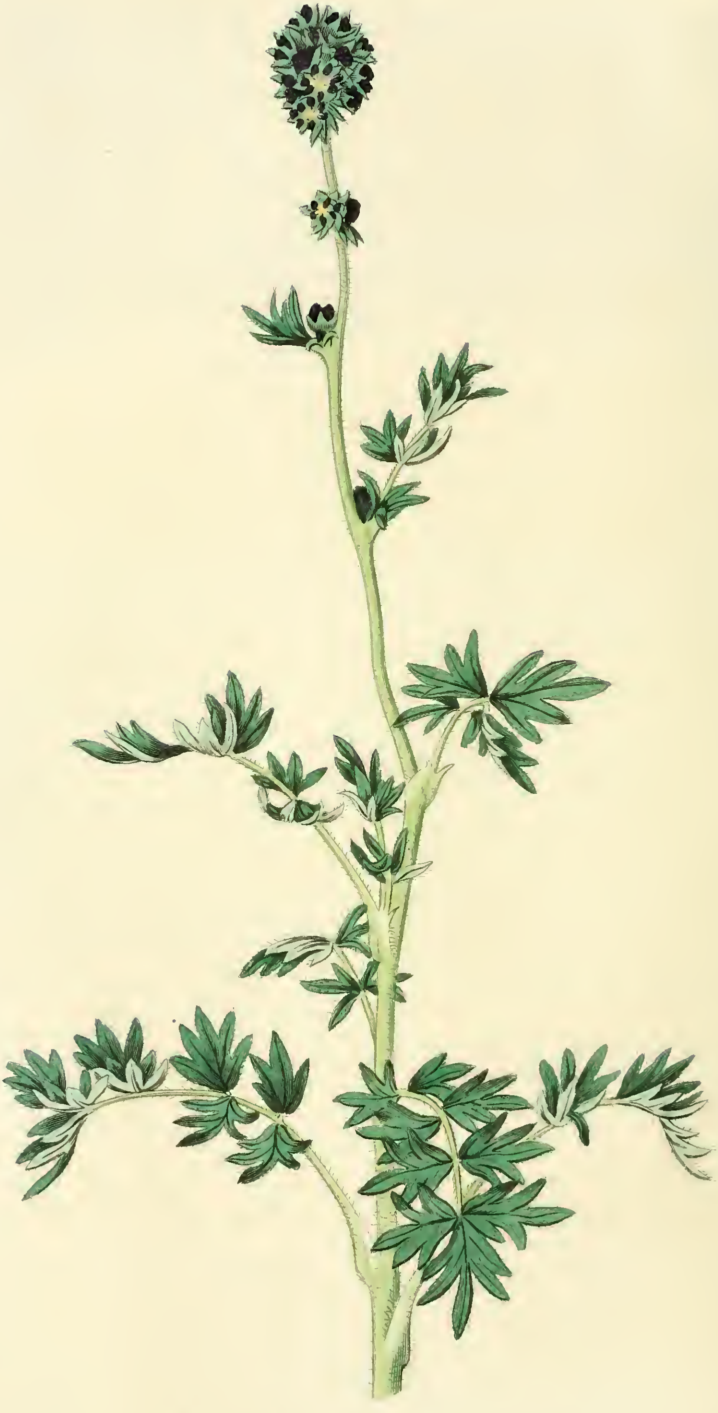
* See fol. 1245.

J. L.

1271.



ACǼNA* pinnatífida.

Pinnatifid Acæna.

DIANDRIA, TRIANDRIA, TETRANDRIA, PENTANDRIA, &c.
MONO-DI-GYNIA.

Nat. ord. ROSACEÆ. § *Sanguisorbeæ.*

ACÆNA Vahl.—*Calyx* basi squamosus, tubo persistente sæpiùs glochidato, limbo 4-partito. *Corolla* 0. *Stamina* 2-10. *Carpella* 1-2, intrà tubum calycis inclusa. *Stylus* terminalis. *Stigma* plumosum. *Fructus* indehiscens è nuce constans monospermâ intrà calycem induratum glochidatum v. tuberculatum inclusâ. *Semen* pendulum.——Herbæ *v.* suffrutices, *humiles.* Folia *impari-pinnata ; foliolis serratis.* Flores *capitato-racemosi, raròsolitarii, herbacei,* antheris *magnis purpureis.*

A. *pinnatifida ;* undique sericea, foliis 4-5-jugis, foliolis altè 3-5-partitis; laciniis linearibus, capitulis spicatis; inferioribus remotis, floribus 5-10-andris, fructibus undique glochidatis.

Acæna pinnatifida. *Fl. Peruv.* 1. *t.* 104. *f.* 1. 6. *Dec. prodr.* 2. 592. *Schlecht. et Cham. Linnæa* 2. 29.

Caulis *ascendens, foliosus, undique pilis sericeis tectus, ut et reliquæ partes.* Folia 4-5-*juga ; foliolis sæpiùs* 4-*partitis, nunc tripartitis, in quibusdam* 5-*partitis, quod rariùs ; inferioribus minoribus alternis, nunc integris.* Flores *hermaphroditi, interruptè spicati.* Spica *è capitulis constans, apice aggregatis, versùs basin remotis, demùm in axillis foliorum depauperatorum uni- bi-floris.* Calyx *inferus, basi bracteis pluribus, imbricatis, scariosis, pilosis munitus, tubo subtetragono, verrucoso, incrassato, in fructu indurato, limbo patente, 5-phyllo, foliolis viridibus, intùs lævigatis, extùs pilosis.* Petala 0. Stamina 5-10, *numero incerta, fauce constricto calycis inserta ;* filamenta *filiformia decumbentia ;* antheræ *magnæ, atropurpureæ, subquadratæ, biloculares, longitudinaliter dehiscentes.* Ovarium *solitarium, intrà tubum calycis inclusum ;* ovulo *solitario, pendulo.* Stylus *cum ovario continuus, et ex apice ejus ortus ;* stigma *magnum, è fimbriis plurimis constans.*

A half-tender herbaceous plant, native of Chile, where it was first found by the authors of the *Flora Peruviana,* by whom it has been figured and described in their great

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* Ἄκαινα signifies a spine: the name has been applied to the genus on account of its spiny fruit.

work. The introduction of it to the Gardens of this country is due to the Horticultural Society, in whose collection at Chiswick, where our drawing was made in May 1828, it had been raised from seeds collected in Chile by Mr. M'Rae. It is increased by cuttings of its half-woody leafy stem, or by division of the roots, or by seeds: during the summer it grows well in the open border, but it will not live there in the winter.

M. Decandolle, in framing the character of this genus, in his *Prodromus*, has unfortunately adopted the error, which, we believe, originated with Forster, of mistaking the calycine segments for petals, and the spines of the tube of the calyx for the real divisions of that organ; — an error avoided by Willdenow, and the learned authors of the *Hortus Kewensis*, but followed by Vahl, and all the later German editors of the *Species Plantarum*. The analogy of Acæna with Alchemilla, Sanguisorba, and other apetalous genera of Rosaceæ, first led us to doubt the presence of its supposed petals; and the examination of this, and some other species, has now confirmed the suspicion that no petals exist; as, we find, has also been pointed out by the learned editor of the *Linnæa*.

In the Herbarium of the Horticultural Society there is an Acæna, found near Conception by Mr. M'Rae, which differs from A. pinnatifida in its more dense habit, in its leaves being white, with long hairs, and in its somewhat larger flowers. This is no doubt the plant spoken of by Schlechtendahl and Chamisso (*Linnæa* 2. *p*. 30.), as having been found by the latter at Talcaguano, and as being the A. *trifida* of the *Flora Peruviana*: if this be so, that species can be scarcely more than a variety of A. pinnatifida, from which it does not appear to us to possess any essential mark of distinction.

In the same collection, but from the Baths of Collina, near the limits of the snow, exists a plant also resembling A. pinnatifida, but differing from it in not having its leaflets deeply 3-5-fid, but regularly and sharply inciso-serrate. This, we presume, is really a distinct species, which may be defined thus: —

A. *incisa*; erecta sericea, foliis 6-7-jugis, foliolis oblongis cuneatis inciso-serratis, capitulis spicatis; inferioribus remotis.

We have also from Dr. Gillies, from Mendoza, a species of Acæna, belonging to the same set as the foregoing, but characterised by its finely cut leaves, and more numerous leaflets: this may be recorded thus: —

A. *myriophylla;* erecta pubescens, foliis 7-9-jugis, foliolis linearibus altè pinnatifidis; laciniis angustissimis subtùs sericeis, spicâ cylindraceâ basi interruptâ, fructibus ovalibus tomentosis glochidatis.

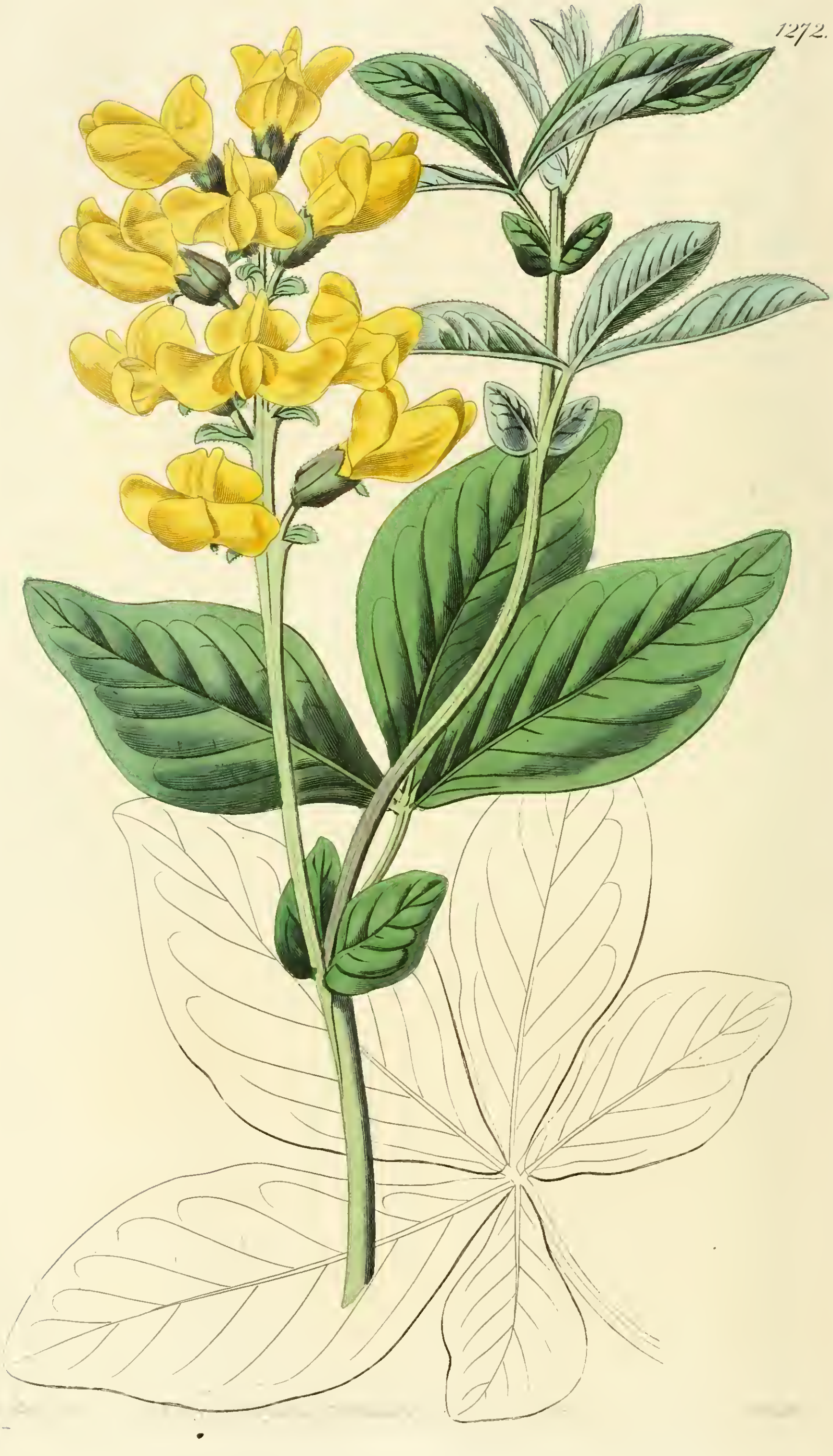
The following is the description of the Acæna pinnatifida as it appears in our Gardens: —

An herbaceous plant, becoming slightly pubescent at the base. *Stem* ascending, leafy, covered all over with silky hairs, as are all the other parts. *Leaves* in 4-5 pairs; leaflets usually 4-parted, sometimes 3-parted, occasionally 5-parted, but this is not common; the lower leaflets smaller, alternate, and sometimes entire. *Flowers* hermaphrodite, in interrupted spikes. *Spike* formed of several heads, clustered at the top, becoming remote towards the base, and finally changing to one or two axillary flowers. *Calyx* inferior, having at its base several imbricated, hairy, scarious bracteæ; the tube 4-cornered, verrucose, thickened, becoming indurated in the fruit; the limb spreading, 5-parted, the divisions green, polished inside, hairy without. *Petals* none. *Stamens* 5-10, uncertain in number, inserted into the contracted tube of the calyx; *filaments* filiform, decumbent; *anthers* large, dark purple, nearly square, 2-celled, dehiscing lengthwise. *Ovarium* solitary, included within the tube of the calyx, with a solitary pendulous ovulum. *Style* continuous with the ovarium; *stigma* large, formed of a bundle of long fringes.

This genus offers an illustration of what is called the certainty and precision (!!) of the Linnæan system of Botany, which is highly amusing. Perhaps some of our friends at Liverpool, the last stronghold of the remnant of the followers of the great Swedish Naturalist, will inform us to what Linnæan class Acæna should be referred.

J. L.

1272.



1272

THERMÓPSIS* fabácea.

Bean-leaved Thermopsis.

DECANDRIA *MONOGYNIA.*

Nat. ord. LEGUMINOSÆ. § *Sophoreæ.*

THERMOPSIS R. Br.—*Calyx* oblongus, campanulatusve, 4-5-fidus, subbilabiatus, postice convexus, basi attenuatus. *Petala* 5, subæqualia, vexillo lateribus reflexis, carinâ obtusâ. *Stamina* persistentia. *Legumen* compressum falcatum aut lineare polyspermum.——Herbæ *perennes, sericeo-villosæ.* Folia *trifoliata.* Stipulæ *ovato-lanceolatæ, foliaceæ.* Racemi *terminales,* floribus *pedicellatis geminis aut subverticillatis flavis.*—Decand. prodr. 2. 99.

T. *fabacea;* foliis petiolatis, foliolis lato-ovalibus, stipulis lato-ovatis obtusis petiolo brevioribus, racemo alternifloro. *Dec. l. c.*

Sophora fabacea. " *Pall. astr. p.* 122. *t.* 90. *f.* 2."

Herba *perennis,* 2-3-*pedalis, radice repente.* Caulis *erectus, flexuosus.* Folia *trifoliolata, nunc* 5-*foliolata ;* stipulis *ovatis, foliaceis ;* foliolis *oblongis, obtusis, v. obovatis, subtùs minutè pubescentibus, venis glabris.* Racemi *axillares, foliis multò longiores, subverticillati.* Calyces *sericei, dentibus ovatis.* Corolla *lutea, glaberrima.* Legumina *erecta,* 3-*uncialia, linearia, pubescentia, compressa, stylo curvo, glabro, indurato apiculata.*

A native of the north-eastern side of Asia, and the north-western of America. It has been found by Russian collectors in Kamtchatka and the Kurile Islands; and Mr. Douglas sent specimens and seeds from the neighbourhood of the Columbia, where it was discovered, as we learn from his Herbarium, in the possession of the Horticultural Society, " in dry channels of mountain torrents, in the valleys of the Blue Mountains."

It is a good herbaceous plant, remarkable for the neatness of its foliage and flowers. Sometimes its leaves are quinate, as represented in the plate.

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* Θέρμος, a lupine, and ὄψις, the appearance ; in reference to the Lupine-like aspect of the genus.

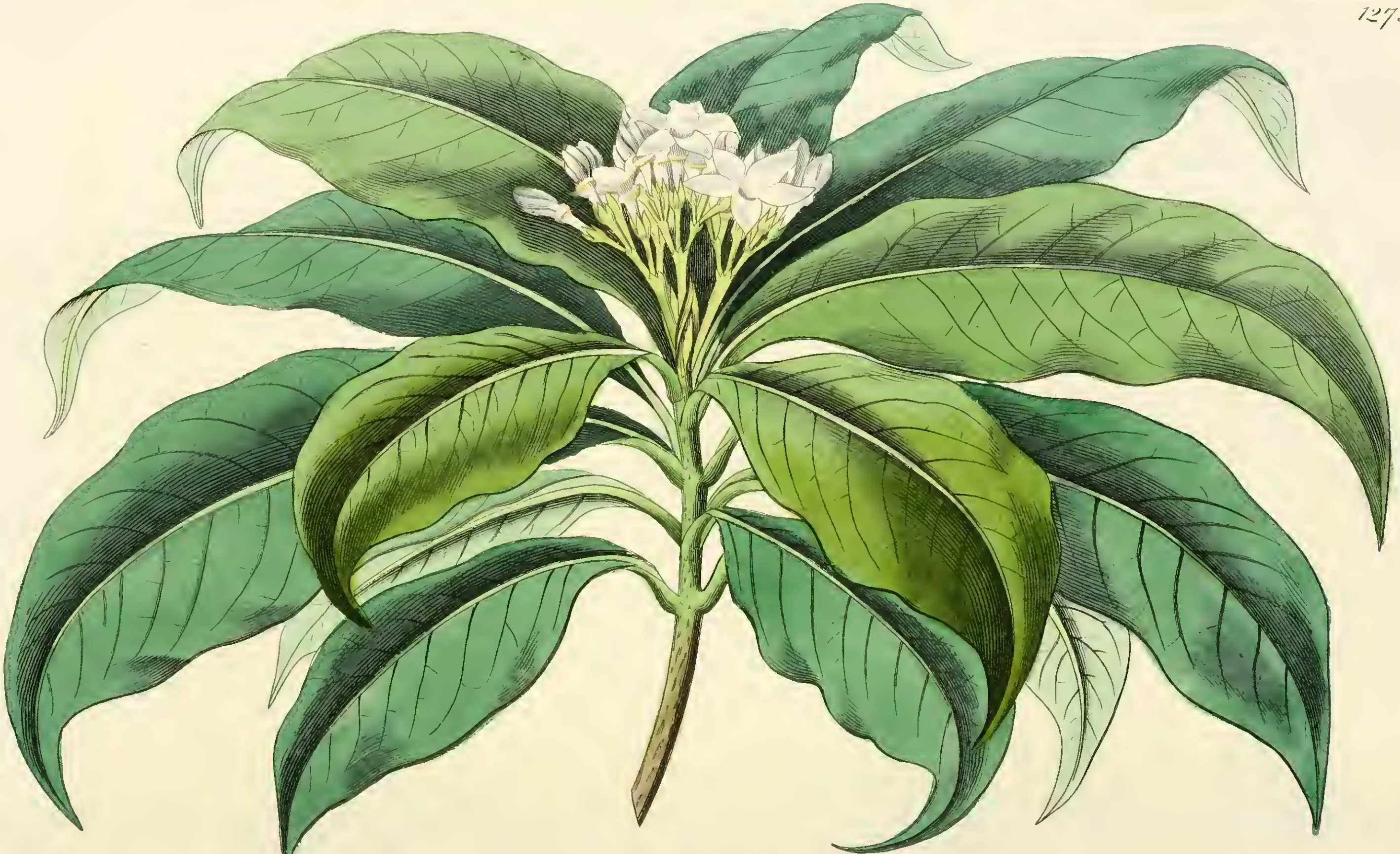
The Thermopsis laburnifolia of Mr. Don, which has also been named Thermopsis napaulensis by M. Decandolle, is, as we have shewn in the *Transactions of the Horticultural Society*, a genuine species of Anagyris, and should be called Anagyris indica.

Easily increased by division of its creeping roots.

A *perennial*, growing 2 or 3 feet high, with creeping roots. *Stem* erect, flexuose. *Leaves* 3-leaved, sometimes 5-leaved; *stipules* ovate, leafy; *leaflets* oblong, obtuse, or obovate, minutely downy beneath, with smooth veins. *Racemes* axillary, much longer than the leaves, somewhat verticillate. *Calyxes* silky, with ovate teeth. *Corolla* yellow, quite smooth. *Pods* erect, 3 inches long, linear, pubescent, compressed, tipped with the indurated, smooth, curved style.

J. L.

1273



Pub by J Ridgway 169 Piccadilly Oct. 1. 1829.

J. Watts sc.

1273

TABERNÆMONTÁNA* densiflóra.

Close-flowered Tabernæmontana.

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PENTANDRIA *MONOGYNIA.*

Nat. ord. Apocyneæ.
TABERNÆMONTANA.—Suprà, vol. 4. *fol.* 338.

T. *densiflora;* foliis lanceolatis acuminatis approximatis nunc ternatis, cymâ multiflorâ brevè pedunculatâ, laciniis calycis bracteisque lineari-lanceolatis acutis, corollæ limbo tubum subæquante, folliculis monospermis.—*Wallich MSS.*

A curious new species, introduced in 1824 by the Honourable Court of Directors of the East India Company, by whom it was presented to the Horticultural Society, in whose Garden at Chiswick our drawing was made in June 1827.

A tender stove plant, extremely different in habit from the common T. coronaria, of the agreeable perfume of which it is entirely destitute. Propagated by cuttings.

Dr. Wallich has been so kind as to favour us with the following interesting account of this and the other Indian species; the greater part either wholly new, or now described for the first time.

J. L.

"I am in some doubt as to the part of India from which this pretty shrub was introduced into the Honourable Company's Botanic Garden at Calcutta. I suspect, however, that it was brought from Ceylon, as I have seen a specimen in the Herbarium of my friend Mr. Lindley, which was collected on that island by Mr. M'Rae.

The following are the East Indian species of Tabernæmontana that have come under my own observation:—

1. T. *coronaria.* Willd.

This is a very common shrub in gardens all over India, both single and double. I have found it seemingly wild in the forests of Lower Nipal, about Hetounda, and at Singapore.

2. T. *recurva.* Roxb. Hort. Beng. p. 20.
T. *gratissima.* Lindl. in Bot. Reg. vol. 13. p. 1084.

A native of the district of Chittagong in Bengal, from whence it was sent to the Calcutta Garden by the late Dr. Hamilton.

3. T. *crispa.* Roxb. Hort. Beng. p. 20.—Foliis oblongis undulatis acutis, pedunculis paucifloris, pedicellis elongatis, calyce profundè 5-partito: laciniis lato-ovatis foliaceis.

Dr. Roxburgh says, in his MS. Flora Indica, that he knows not from whence this large shrub was introduced into the Calcutta Garden. He quotes, however, Rheede's *Curutu Pala* as a synonyme, which points out Malabar as the native country.

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* James Theodorus (commonly called Tabernæmontanus, from Bergzabern, in Alsace, the place of his birth) was a Botanist of the sixteenth century, whose works have long sunk into oblivion. He died in 1590.

4. T. *persicariæfolia*. Jacq.

I have received specimens which were gathered at the Isle of France by my friend C. Telfair, Esq.

5. T. *dichotoma*. Roxb. Hort. Beng. p. 20.—Foliis oblongis obtusis coriaceis lucidis subtùs parallelè et transversè multinervosis, cymâ elongatâ dichotomâ, laciniis calycis obtusis, corollæ oblongo-falcatis tubum æquantibus.

This grows to the size of 12 to 16 feet, with a peculiarly dark and glossy foliage, and yellowish, delightfully fragrant flowers. It is a native of Ceylon and Malabar.

6. T. *corymbosa*. Roxb. MSS. — Foliis oblongo-ellipticis obtusè acuminatis deorsùm valdè attenuatis, cymâ multiflorâ longè pedunculatâ, laciniis calycis ovatis acutiusculis, corollæ subovatis tubo triplò brevioribus.

A large handsome species, which I found in the mountain forests of Prince of Wales's Island.

7. T. *Heyneana*. Wall.—Foliis ovato-lanceolatis acuminatis, pedunculis paucifloris, laciniis calycis rotundatis obtusis, corollæ obovatis crispatis tubum subæquantibus.

Specimens of this are preserved in the late Dr. Heyne's collection in the Company's Museum, under the name of T. *corymbosa*. In the same Herbarium there are specimens, under the same name, of a species in fruit, which is probably distinct, having oblong, coriaceous, and lucid leaves, and ovate, short-pointed fruit, about an inch long. This species might be called T. *oblonga*.

8. T. *Telfairiana*. Wall. — Foliis ovalibus utrinque obtusissimis, pedunculis subaxillaribus bis terve furcatis, laciniis calycis ovatis obtusiusculis, corollæ oblongis tubum subæquantibus.

Specimens were sent to me from the Mauritius by Mr. Telfair. They seem to differ from the description of T. *mauritiana* Poir.

9. T. *peduncularis*. Wall. — Foliis oblongo-lanceolatis gracillimè acuminatis subtùs transversè nervosis, pedunculis filiformibus longissimis, pedicellis subumbellatis, folliculis pedicellatis ovatis subrostratis.

A native of Pulo Penang, from whence specimens were sent to me by Mr. George Porter.

10. T. *graciliflora*. Wall. — Foliis oblongis subcaudato-acuminatis, pedunculis axillaribus longissimis, floribus subracemosis, lobis calycis ovatis acutis, corollæ oblongis, tubo gracillimo triplò brevioribus.

I found this shrub at Moolmeyn and Amherst, in Martaban. I have also met with it in fruit on the hills at Segaen, opposite the city of Ava, although I am not quite certain of its identity.

11. T. *calycina*. Wall. — Foliis lanceolatis, pedunculis paucifloris, floribus brevè pedicellatis subfasciculatis, laciniis calycis bracteisque seriùs delabescentibus elongatis linearibus, corollæ lobis lanceolatis limbo dimidiò brevioribus.

Specimens were gathered at Tavoy, on the coast of Tenasserim, by Mr. William Gomez, plant collector in the employ of the Calcutta Garden.

12. T. *rostrata*. Wall.—Foliis lanceolatis gracillimè acuminatis, pedunculis paucifloris, laciniis calycis subligulatis, tubo corollæ gracili medio staminifero et tumido limbo bis longiore, folliculis oblongis suprà bicarinatis attenuato-rostratis.

I found this very distinct species on the lime hills at Segaen.

13. T. *subcapitata*. Wall. — Foliis oblongo-lanceolatis, pedunculis gracilibus apice confertè multifloris, pedicellis brevibus, laciniis calycis ovato-acutis, corollæ subovatis tubum subæquantibus.

Discovered at Tavoy by Mr. Gomez.

14. T. *densiflora*. Wall. — See above.

15. T. *microcarpa*. Wall. — Foliis oblongis, acuminatis, pedunculis paucifloris fasciculatis, folliculis sessilibus ovatis 1-spermis.

I have only seen this shrub in fruit towards the mountains called Toong Dong, near Ava. The follicles resemble those of T. *densiflora*.

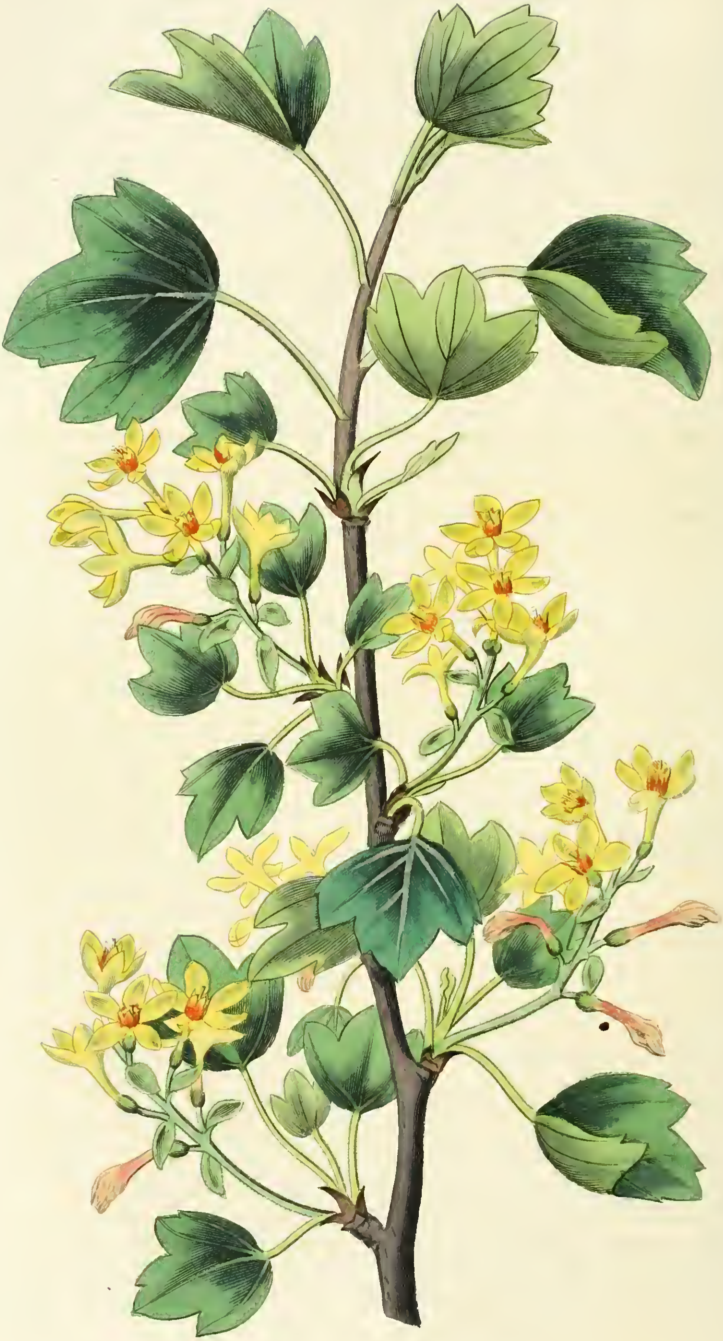
16. T. *salicifolia*. Wall.—Foliis lineari-lanceolatis attenuato-acuminatissimis margine undulatis subtùs glaucis, laciniis calycis lanceolatis acutis.

Specimens of this strongly marked species are preserved in Dr. Heyne's Herbarium, under the name of T. *parviflora*, with unexpanded flowers. I sent some of them home to the Honourable East India Company's Museum in 1824, as a species of *Alyxia*.

17. T. *macrocarpa*. Jack in Misc. Malayan, vol. 2. n. 8. p. 80.—Foliis ovato-ellipticis basi attenuatis, corymbis terminalibus dichotomis, folliculis maximis subglobosis.—*Jack l. c.*

A native of the interior of Bencoolen, where it attains the size of a large tree. I have not seen specimens of it; but I notice the species because it was discovered by one of the dearest friends I ever had in India, and has been published so far back as 1822 in a most valuable but very little known work. It has not been mentioned by any subsequent writer."

1274



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RÍBES* tenuiflórum.

Scarlet-leaved Currant.

PENTANDRIA *MONOGYNIA.*

Nat. ord. GROSSULACEÆ.
RIBES.—Suprà, vol. 2. fol. 125.

R. *tenuiflorum;* inerme, foliis subrotundis trilobis farinosis; lobis apice obtusè dentatis, racemis pendulis multifloris, calycibus tubulatis glabris pedicello longioribus coloratis, petalis integerrimis calycis laciniis linearibus obtusis duplò brevioribus, baccis glabris.
Ribes tenuiflorum. *Lindley in Hort. Trans. vol.* 7. *p.* 242.
Ribes aureum. *Colla Hort. Rip. app.* 3. *t.* 1. *A.* nec aliorum.

This species has no doubt been confounded by Botanists with R. aureum, with which it agrees in many respects. It has, however, been distinguished by M. Colla in his third Appendix to the Catalogue of Plants cultivated in his Garden at Ripuli; but we think he errs in supposing it to be the type of R. aureum, as may, perhaps, be shewn by an examination of the history of that species. R. *aureum* was first described by Pursh, from specimens collected in the Missouri country by Lewis and Clarke, and from plants which he saw growing in the Gardens of England. Now, although it is very possible that the specimens referred to by Pursh as having been seen by him, were R. tenuiflorum, yet he chiefly relied upon the garden plant for his description and characters. That the garden plant seen by Pursh was the same species as that figured at t. 125 of this work, there can be no doubt, it having been the only one in our Gardens when that Botanist was in England. The R. tenuiflorum was not introduced before 1824, when plants of it were obtained from an American Nurseryman by the Horticultural Society. Supposing Pursh to have

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[*] See fol. 1237.

confounded the two species, which is extremely probable, yet the old garden plant should be taken as that which he more particularly intended to describe.

The names given by the American Gardeners to this species, such as Lewis's Scarlet Currant, Lewis's Yellow Currant, seem to attest its origin, and make it probable that it had been raised from seeds collected in Lewis and Clarke's expedition. This is rendered still more credible by its being the species found by Mr. Douglas in North-west America, if we may judge from the specimens in his Herbarium, and from plants in the Horticultural Society's Garden, raised from his seeds. This being the case, the remarks made by us in the *Horticultural Transactions*, upon Mr. Douglas's authority, concerning the excellent quality of the fruit of Ribes aureum when growing " upon high dry limestone rocks," should be applied to Ribes tenuiflorum.

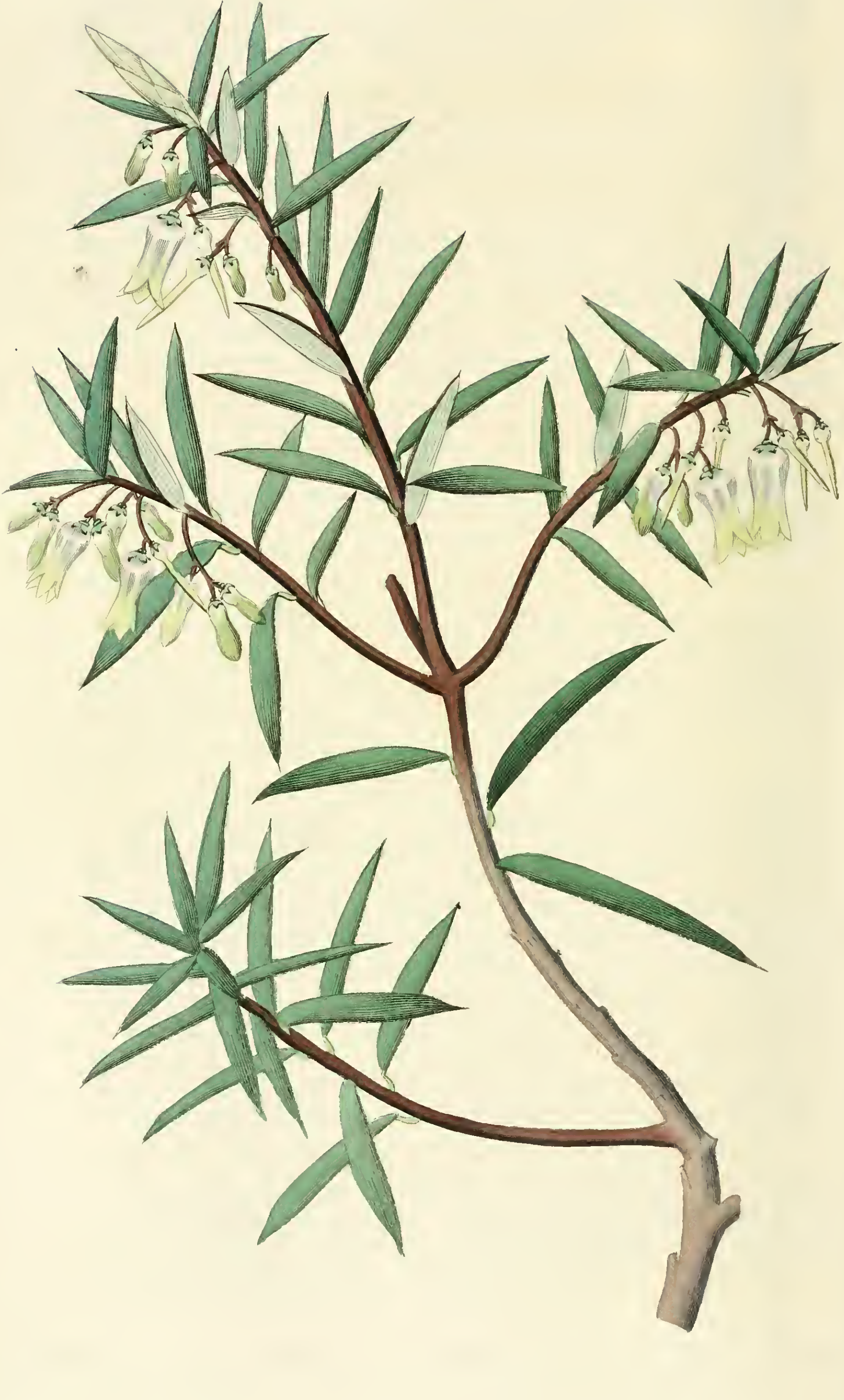
Upon further examination of the supposed variety of this species, the leaves of which change to scarlet in the autumn, we now incline to refer it rather to R. aureum, if, indeed, it be not a species by itself.

About the same time as M. Colla published his observations on this species, we had introduced it into a report made to the Horticultural Society upon the rare plants of their Garden; from which communication we take the liberty of making the following extract:—

" In habit this species is more erect than R. aureum, and has the young wood more thinly clothed with leaves: its whole appearance is also paler during the early part of the year.—The leaves are nearly round, 3- or 5-lobed, when young covered with a kind of mealy bloom, when more advanced cordate at the base, and at all times, in the plants that I have examined, wholly destitute of pubescence. The flowers are not more than half the size of those of R. aureum, and have entire, not notched petals. The fruit is the size of the Red Currant, with a thick skin, and a dense mucilaginous pulp, of an agreeable flavour, but possessing little acidity, and far inferior to our cultivated Currants. The berries ripen about the middle of July.

" There are two varieties, the one bearing black, and the other yellow, fruit; the former changes from yellow to red, and finally acquires a deep blackish purple hue; the latter always retains its yellow colour."

J. L.



1275

LISSÁNTHE* sápida.

The Australian Cranberry.

PENTANDRIA *MONOGYNIA.*

Nat. ord. EPACRIDEÆ.

LISSANTHE R. Brown.—*Calyx* bibracteatus v. ebracteatus. *Corolla* infundibuliformis limbo imberbi. *Ovarium* 5-loculare. *Drupa* baccata, putamine osseo solido. —— Fruticuli *erecti.* Folia *sparsa, subtùs lineata.* Flores *inter minores, albi.* Discus *hypogynus, cyathiformis, 5-lobus.*—R. Brown prodr. 540.

L. *sapida;* racemis 2-3-floris recurvis, foliis oblongo-linearibus mucronatis margine revolutis; subtùs dealbatis striatis. *R. Br. l. c.*

The Australian Cranberry. *Library of entertaining knowledge, vol.* 2. *p.* 421.

Rami *murini, teretes.* Folia *conferta, uncialia, glaberrima, coriacea, linearia, utrinque acuta, subtùs albida, superficie stomatibus minutis densissimè tectâ, venis parallelis stratum inferius parenchymatis tantùm percurrentibus.* Racemi *recurvi, 3-flori.* Pedicelli *breves, basi bracteolis* 4, *duris, decussantibus muniti.* Calyx *5-phyllus, sepalis parvis, ovatis, duris, pallidis, roseo marginatis, imbricatis.* Corolla *hypogyna, campanulata, medio paulò constricta, facilè in petalis quinque separabilis, monopetala tamen, tubo intùs lineâ transversâ barbatâ in medio.* Stamina 5, *ad sinus corollæ subsessilia, filamentis corollæ adnatis ad annulum barbatum usque.* Antheræ *uniloculares, longitudinaliter dehiscentes, ad apicem crassiores.* Ovarium *disco cyathiformi cinctum.* Stylus *leviter pilosus.*

This is a handsome greenhouse shrub, native of New Holland, in the vicinity of Port Jackson, flowering in this country in the winter months. The specimen here figured was communicated by Mr. Mackay, of the Clapton Nursery, in December 1828.

The fruit is a succulent drupe, and is mentioned in the *Library of Entertaining Knowledge,* under the name of the Australian Cranberry, as being " of a very delicate peach-bloom colour, having something of the consistency and taste of the Siberian Crab." We wish, if it ripens its fruit in this country, it may be found worthy of even this description.

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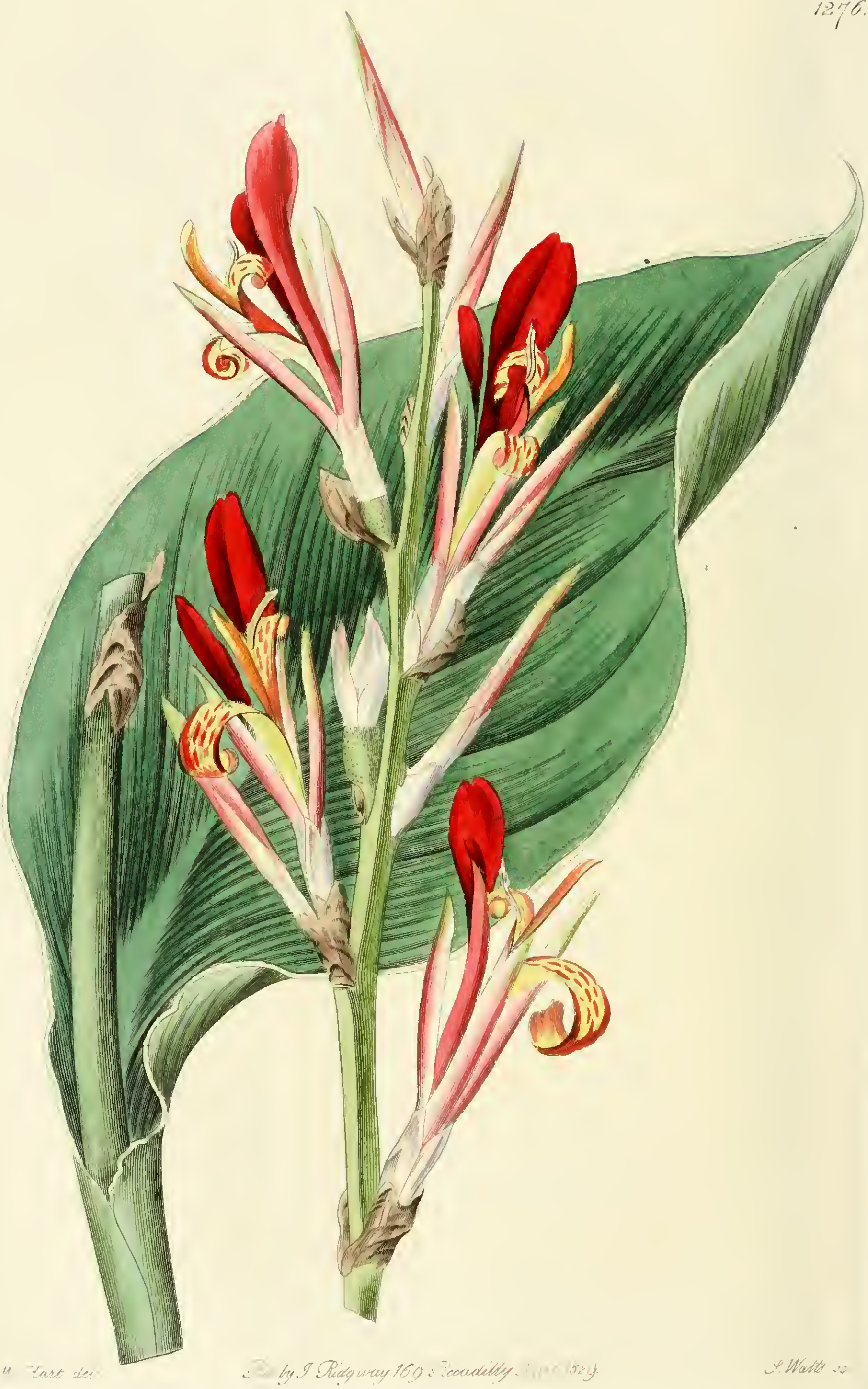
* From λισσὸς, smooth, and ἄνθος, a flower; in allusion to the polished surface of the corolla.

Branches mouse-colour, taper. *Leaves* close, an inch long, quite smooth, coriaceous, linear, acute at each end, beneath whitish, the surface being covered by numerous minute stomata, and marked by parallel veins, which only traverse the lower stratum of parenchyma. *Racemes* recurved, 3-flowered. *Pedicels* short, having at their base 4 hard, decussating bracteæ. *Calyx* 5-leaved, the sepals small, ovate, hard, pale, bordered with pink, and overlapping each other. *Corolla* hypogynous, campanulate, a little contracted in the middle, easily separable into 5 petals, being, however, truly monopetalous, the tube bearing in the middle in the inside a bearded ring. *Stamens* 5, nearly sessile at the recesses of the corolla, traces of their filaments being visible as far as the bearded ring. *Anthers* 1-celled, opening longitudinally, thickest at the apex. *Ovarium* seated in a cyathiform disk. *Style* slightly hairy.

J. L.

1276.



M Hart del. Pub by J Ridgway 169 Piccadilly Sept 1 1829. S Watts sc.

CÁNNA* speciósa.

Shewy Canna.

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MONANDRIA *MONOGYNIA.*

CANNA.— Suprà, vol. 7. *fol.* 576.

C. *speciosa;* paniculâ amplâ ramosâ undique furfuraceo-pruinosâ, bracteis laxis ventricosis subtruncatis, corollâ 6-partitâ infundibuliformi bilabiatâ, laciniis labii superioris subfornicatis retusis: inferiore recurvatâ emarginatâ, rachibus triquetris.—*Wallich MSS.*

Canna speciosa. *Roscoe scit. Herbert in bot. mag. v.* 49. *t.* 2317. *Spreng. curæ post. p.* 5.

Planta *speciosa,* 4-6-*pedalis, quin ultrà, caule basi crasso, supernè in ramos plures simplices patulos paniculatim ramosa.* Folia *lato-ovata, vel ovato-lanceolata, in acumen breve gracile attenuata, membranaceo-marginulata, parùm undulata, basi rotundata, subamplexicaulia, inferiora pedalia bipedalia.* Vaginæ *superiores spathaceæ, ramorum bases laxè amplexantes, sæpè terminatæ laminâ parvâ foliaceâ.* Panicula *ampla, elevata, omnibus partibus obtectis purpuraceo-pruinosis.* Racemi *multiflori, magni, ovati, rachibus acutè trigonis, coloratis, parùm flexuosis.* Flores *geminati, coccinei, fundo maculato-lutei, suffulti bracteis tribus membranaceis, calyce ovarioque valdè furfuraceis, rufescentibus, subdiaphanis; exteriore ferè pollicari, basin fasciculi laxè involvente, rotundato-ovatâ, ventricosâ, obtusissimâ, subtruncatâ; interioribus ovatis, istâ multò minoribus.* Calyx *rufescens; laciniæ subæquales, lanceolatæ, acutæ, semiunciales.* Corolla *ferè* 3-*pollicaris, infundibuliformis, extùs parùm furfuracea.* Tubus *brevis, pallidus, flavescens.* Limbus *patulus; laciniæ exteriores lanceolatæ, acuminatæ, totâ corollâ tertiò breviores; una reliquis paullò minor; laciniæ interiores duæ, superiores erecto-conniventes, concaviusculæ, subfornicatæ, lanceolatæ, retusæ, nunc distinctiùs bidentatæ, deorsùm attenuatæ in unguem canaliculatum; inferior labium inferius corollæ efficiens, linearis, retusa, decurvato-porrecta, ad discum uti filamentum flavo lineata.* Filamentum *labio inferiori subsimile, sed paullò brevius, et contrariâ directione, i. e. sursùm recurvum, obliquè acutum.* Stylus *saturatiùs coloratus, lucidus, terminatus stigmate carnoso, transverso, lineari.* Capsula *magna, densissimè echinata, aculeis conicis mollibus, obtusè trigona.* Semina *magna, atra.*—Wallich MSS.

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* This is a Greek word, of unknown origin, unless we adopt De Théis' opinion, that it has proceeded from the Celtic *cana,* a reed, or rather cotton-grass. We read somewhere in Ossian, that "her neck is white as the down of Cana."

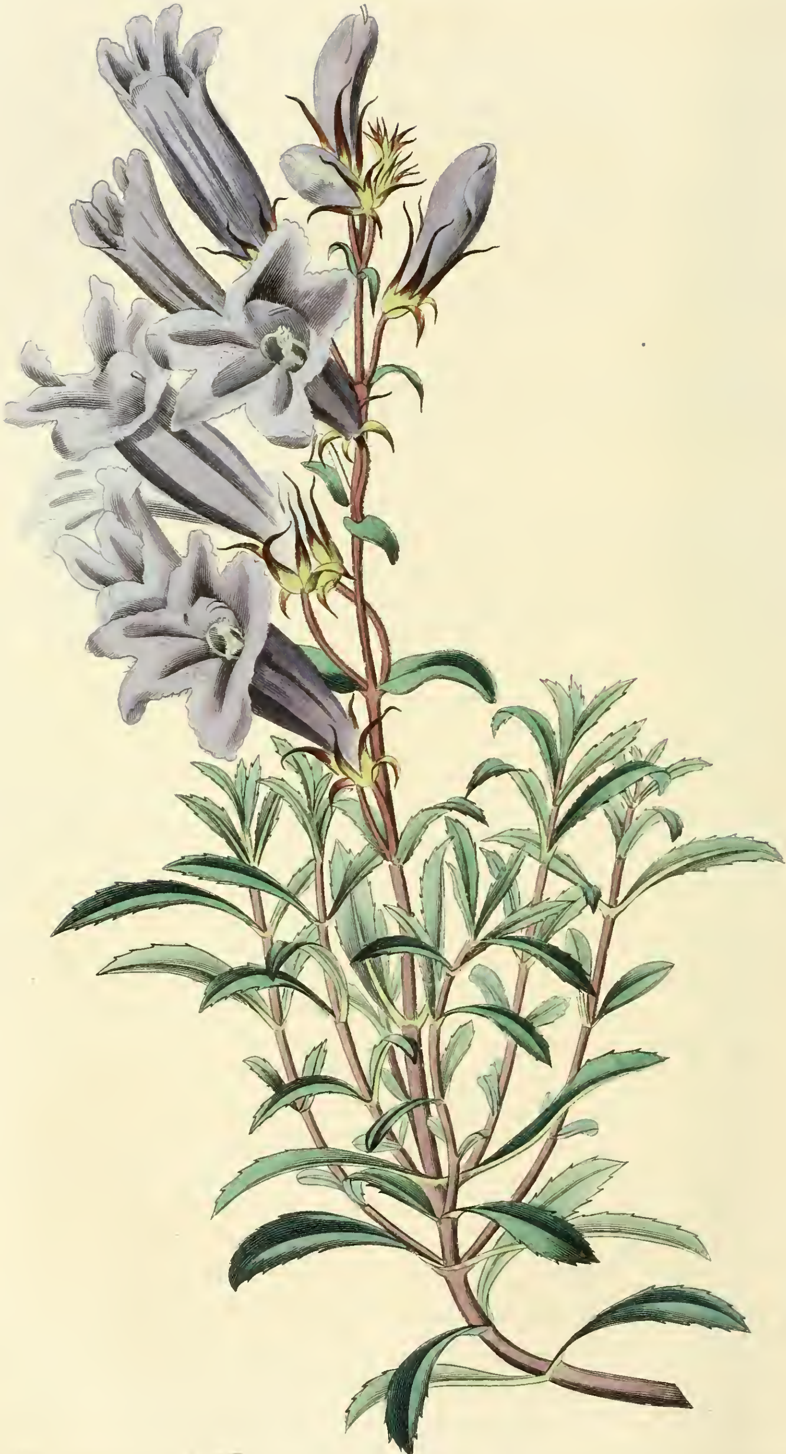
Dr. Wallich remarks, in a communication with which he has favoured us, and from which the above description is extracted, that "This stately and ornamental species grows wild in the valley of Nipal, and among the surrounding mountains. It is also found in the province of Kamoon. It was introduced into the Calcutta Garden in 1817, by the Honourable Edward Gardner, resident at the Court of Katmandoo. It is in blossom and ripens its fruit almost all the year round."

Our drawing was made in August last, from a plant in the Garden of the Horticultural Society, to which establishment it had been presented by the Honourable Court of Directors of the East India Company.

It appears, from an Indian drawing made under Dr. Wallich's direction, that in its native country it becomes a much larger plant than that from which the accompanying figure was taken, with a wide branching panicle, and broad furfuraceous or pruinose truncate bracteæ.

J. L.

1277



G. Hart del. Pub by J. Ridgway 169 Piccadilly Nov 1 1829. J Watts sc.

PENTSTÉMON* Scouléri.

Dr. Scouler's Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ.
PENTSTEMON. — *Suprà, vol.* 13. *fol.* 1131.

P. *Scouleri;* suffruticosum, foliis obovato-lanceolatis serrulatis supremis integerrimis obtusis, floribus solitariis racemosis, corollis ventricosis serrulatis, antheris lanatis.

Chelone Scouleri. *Douglas in herb. Hort. Soc.*

Suffruticosum; *rami teretes; ramuli pilosiusculi.* Folia *lineari-lanceolata, obovata, acuta, argutè serrata, nunc subintegerrima, supremis oblongis, obtusis, integerrimis.* Bracteæ *lineari-lanceolatæ, integræ, pedicellis breviores.* Calyx *5-phyllus, sepalis acuminatis, pubescentibus.* Corolla *purpurea, ferè 2 uncias longa, ventricosa, limbo bilabiato, labio superiore bilobo, inferiore trilobo, palato aperto, pubescente.* Antheræ *lanuginosæ.* Semina *angulata.*

Mr. Douglas considers this a species of Chelone; and it doubtless approaches that genus in the structure of its anthers, and very much agrees with the plant already figured in this work under the name of C. nemorosa: but we have already stated that species to be a very doubtful Chelone; and this we consider still more so. It is distinguished from Chelone by the form of the palate of the flower, and by its angular seeds,—circumstances which, taken together, are doubtless of more value than the single peculiarity of the anthers.

A native of the Kettle Falls of the Columbia, where it was found by Mr. Douglas. In its native country it is half shrubby, and would be the same with us in warm situations: it is, however, best considered as a perennial.

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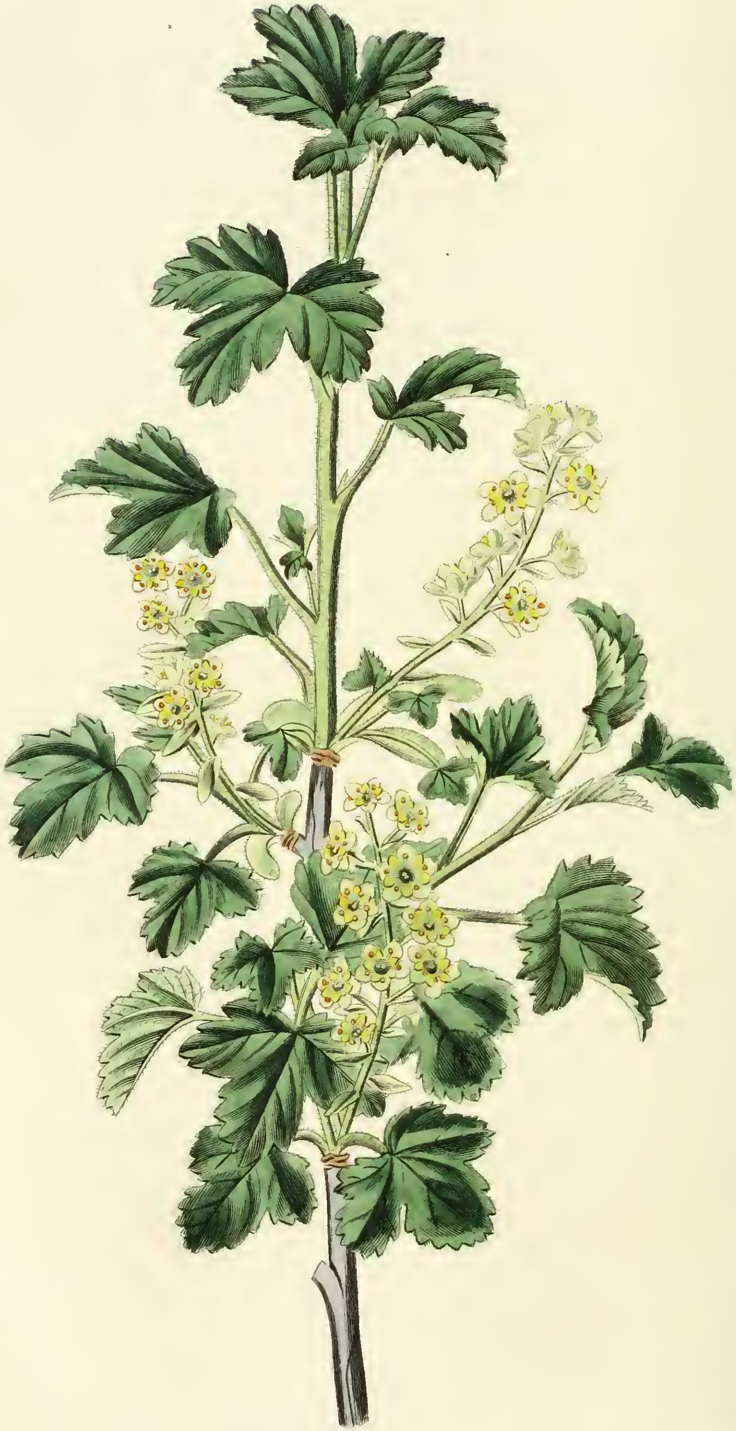
* See fol. 1245.

It is very hardy, will grow in any soil, and propagates abundantly either by seeds or cuttings. It blossoms in May and June, and is one of the handsomest border flowers of that season.

Gerardia fruticosa of Pursh is nearly related to this plant.

The species was named by Mr. Douglas in honour of Dr. Scouler, the companion of his voyage to the west coast of America, who has, we understand, been recently appointed to the chair of Natural History in the University of Glasgow.

J. L.



RÍBES* punctatum.

Dotted Currant.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Grossulaceæ.
RIBES.—Suprà, vol. 2. fol. 125.

R. *punctatum;* inerme, foliis trilobis serratis subtùs bracteisque resinoso-glandulosis, spicis foliis longioribus, bracteis cuneato-oblongis obtusis post anthesin reflexis, calycibus campanulatis.

R. punctatum. *Fl. Peruv. p.* 12. *t.* 233. *f. a. Decand. prodr.* 3. 482.

Frutex *erectus, inermis, in hortis* 2-3-*pedalis.* Rami *cinerei, pubescentes.* Folia *pubescentia, triloba, acutè serrata, subtùs glandulis resinosis adspersa; lobis divaricatis: intermedio quasi triangulari.* Spicæ *multifloræ, in cultâ erectæ, in spontaneâ nutantes, foliis longiores, pubescentes.* Bracteæ *membranaceæ, glandulosæ, cuneato-oblongæ, floribus breviores, mox reflexæ, demùm deciduæ.* Flores *flavescentes.* Calyx *brevis, campanulatus, apertus, glaber.* Petala *minima, squamiformia, integra.* Ovarium *et* baccæ *leviter glandulis resinosis irroratæ.*

This shrub is a native of the high hills of Chile, about Valparaiso and Conception, where it was found by Mr. M'Rae, while stopping in that country, in 1825. By him seeds were transmitted to the Horticultural Society, in whose Garden they were raised.

A neat shrub, too impatient of cold to thrive in the open air, except in very sheltered situations. The plant from which our figure was taken was trained to a south wall.

We find this difference between the cultivated and wild plant, that in the former the spikes are erect, and in the latter pendulous or nodding. The berries are red, and about the size of a red currant, but without any merit as fruit.

Easily propagated by cuttings. J. L.

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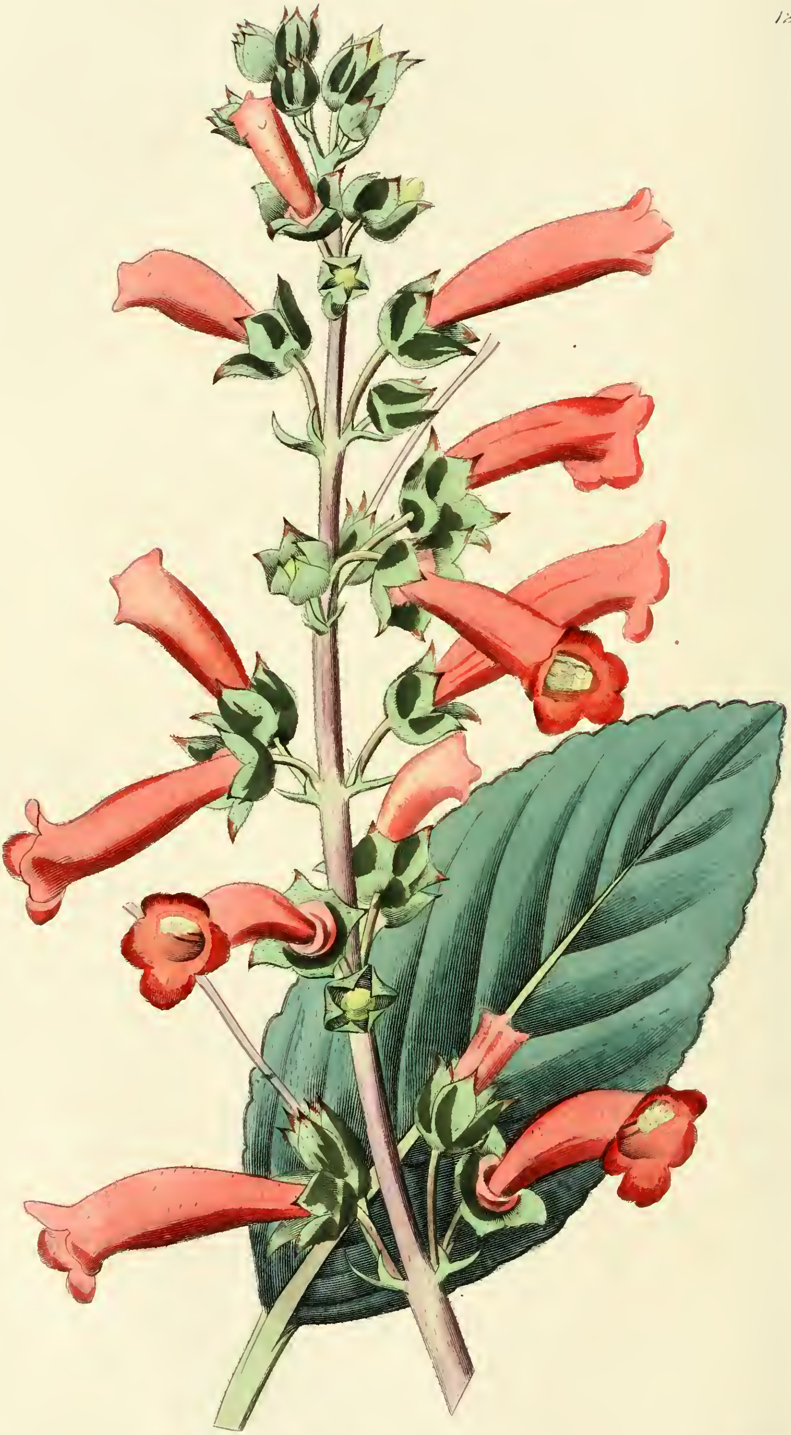
* See fol. 1237.

1279



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GESNÉRIA* rútila; *var.* atrosanguinea.

Brilliant Gesneria; deep crimson variety.

◆

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. GESNERIEÆ.
GESNERIA.—*Suprà, vol.* 4. *fol.* 329.

G. *rutila;* herbacea, hirsuta, foliis oppositis oblongis grossè crenatis utrinque concoloribus, floribus axillaribus solitariis erectis, calycibus inflatis, corollis pedicello longioribus.—*Suprà, fol.* 1158.
Var. Floribus saturatè sanguineis, calycibus sanguineo marginatis.

This fine plant is certainly a mere variety of G. rutila; but its great beauty renders it worthy of being recorded.

It is a native of Rio Janeiro, whence it was brought by Mr. J. Macculloch, Gardener to the Right Honourable Robert Gordon, by whom it was presented to the Horticultural Society.

It is a tender stove plant, flowering in profusion in August and September. Our drawing was made in the Chiswick Garden, in the present year.

J. L.

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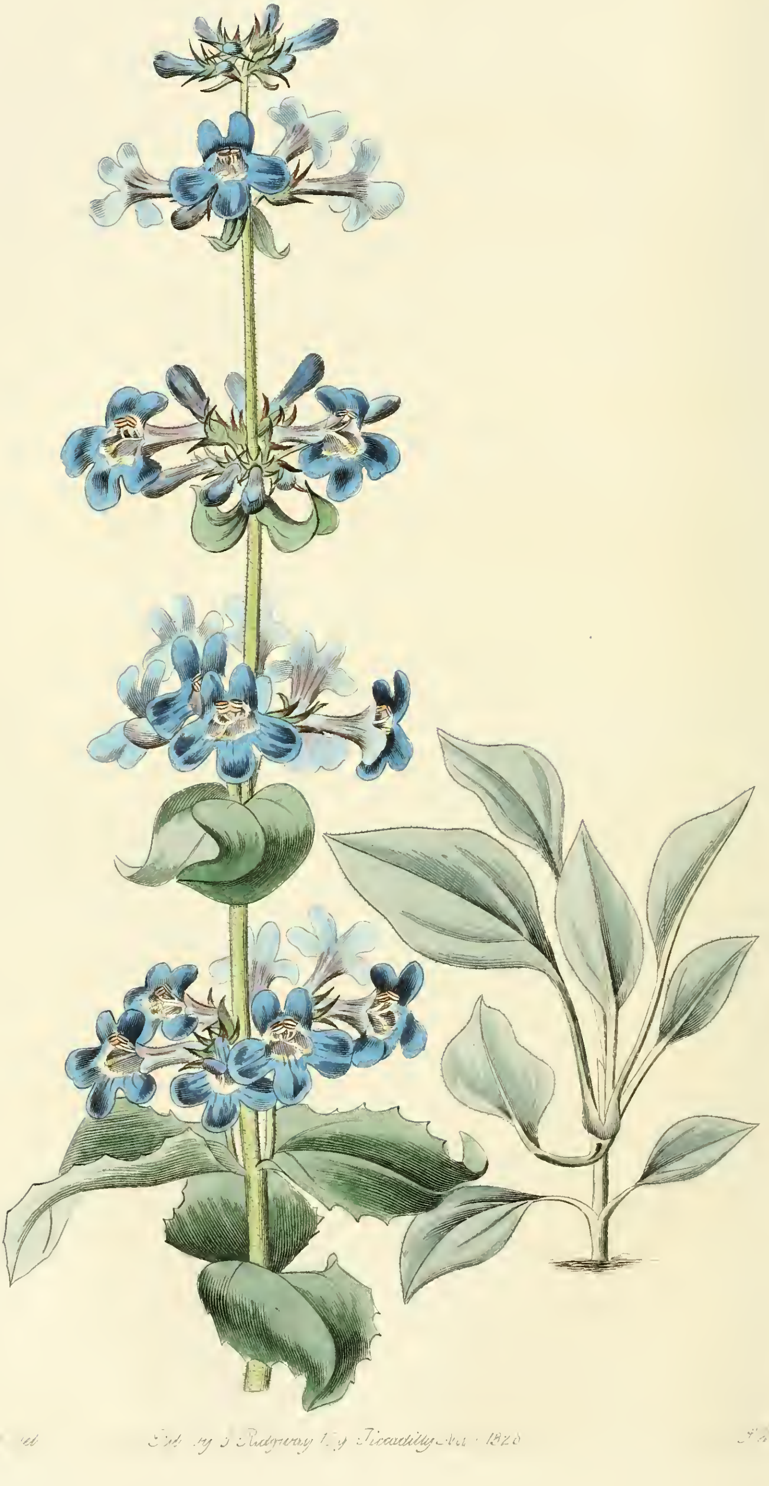
[*] See fol. 1158.



del Pub. by J. Ridgway 169 Piccadilly Nov. 1828

PENTSTÉMON* pruinósum.

Blue-leaved Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ.
PENTSTEMON. — *Suprà, vol.* 13. *fol.* 1121.

P. *pruinosum;* foliis cæsiis, radicalibus petiolatis integris dentatisve, caulinis dentatis sessilibus, bracteis superioribus integris, floribus verticillatis, calycibus bracteisque villosis, corollis glabris calycibus duplò longioribus; limbi laciniis rotundatis integris.

P. pruinosum. *Douglas in herb. Hort. Soc.*

Perennis $\frac{1}{2}$- 1$\frac{1}{2}$-*pedalis, undique pruinâ cæsiâ irrorata.* Folia *radicalia cæspitosa, pubescentia, rigida, nunc, præsertim in cultis, integerrima, nunc dentata.* Verticillastra 7-8-*flora.* Flores *cyanei.*

This rivals the fine P. speciosum in the brilliancy of its colouring, and exceeds it in the neatness of its appearance. It was found by Mr. Douglas near the Priest's rapid of the Columbia, and by him sent to the Horticultural Society, in whose Garden our drawing was made in July last.

It is perfectly hardy, and perennial; but, like many of the newly-introduced species of this genus, is apt to exhaust itself so much in flowering as to become little better than a biennial. This may, however, be prevented by pinching a part of the flowering stems of each plant, upon their first appearance, — a practice which may be advantageously adopted with regard to all plants having similar habits.

It should be cultivated in a shady place, in some light soil, in which it will flower beautifully during all June, July, and August, ripening seeds in tolerable abundance.

J. L.

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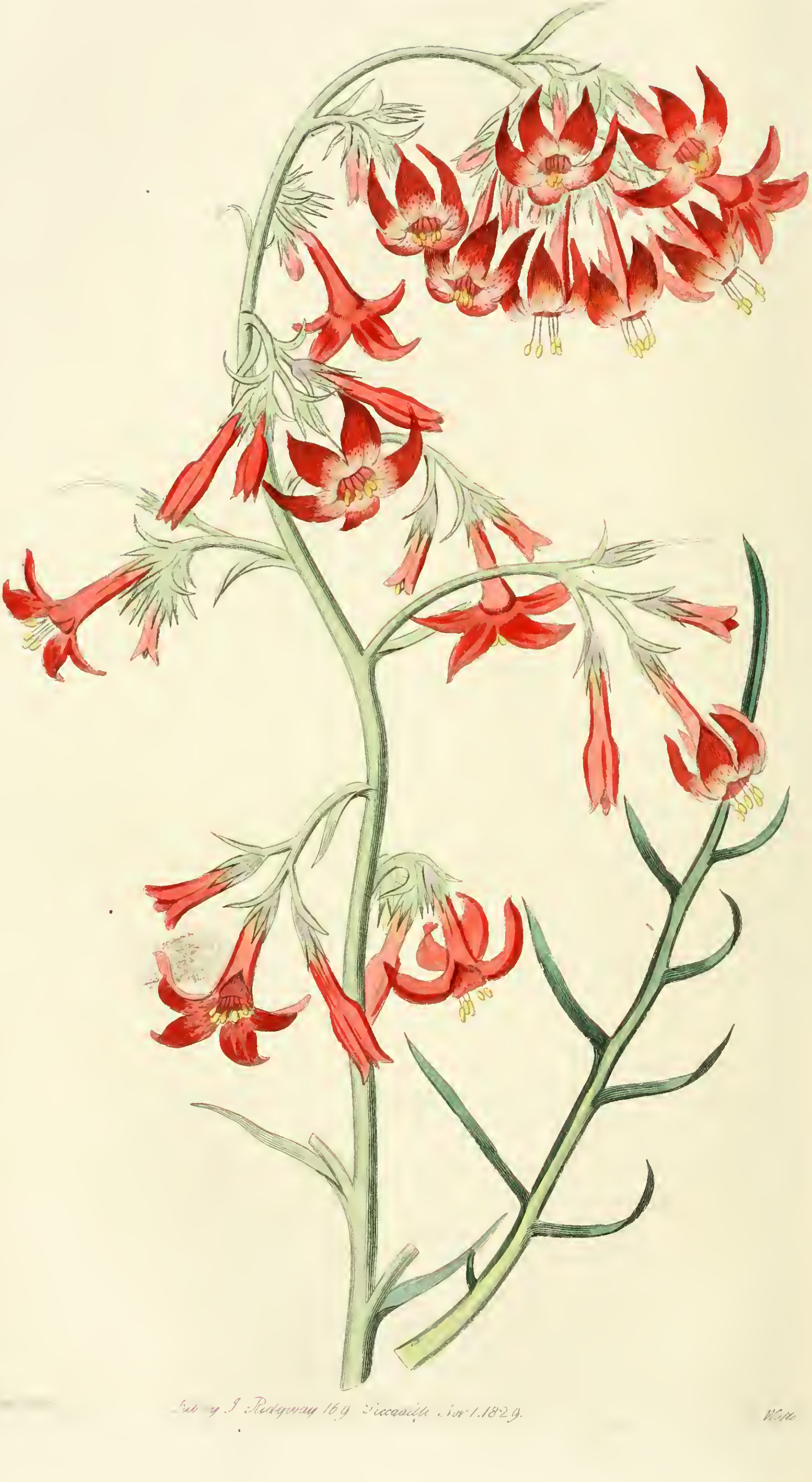
* See fol. 1245.



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Watts

1281

IPOMÓPSIS* elegans.

Elegant Ipomopsis.

◆

PENTANDRIA *MONOGYNIA.*

Nat. ord. Polemoniaceæ.

IPOMOPSIS.—*Calyx* 5-partitus, laciniis acuminatis, sinubus et angulis membranaceis. *Corolla* infundibuliformis, speciosa, calyce multò longior, decidua. *Stamina* 5, intrà tubum corollæ inserta. *Capsula* trilocularis, oligosperma. —— Herbæ *Americæ septentrionalis,* foliis *pinnatifidis,* floribus *racemoso-paniculatis,* bracteis *subulatis;* corollis *speciosis,* pubescentiâ *glandulosâ.*

I. *elegans;* floribus aggregatis paniculatis nutantibus, laciniis corollæ acuminatis maculatis, foliis pectinatis bracteisque sparsè arachnoideo-villosis.

Ipomopsis elegans. *Smith exot. fl. t.* 13. *Mich. fl. bor. am.* 1. 142.
Gilia coronopifolia. *Pers. synops.* 1. 187.
Gilia pulchella. *Douglas in herb. Hort. Soc.*

Herba *biennis, vix perennis,* 3-*pedalis.* Folia *radicalia cæspitosa, atro-viridia, paululùm succulenta, pectinata, pilis arachnoideis sparsè, præsertim suprà costam villosa, superioribus indivisis.* Caulis *glanduloso-pilosus.* Flores *paniculati, aggregati, nutantes.* Calyx *glanduloso-pilosus.* Corolla *unciam longa, infundibuliformis, coccinea, limbo suberecto, demùm recurvo, laciniis acutis, maculatis.* Stamina *paulò exserta, intrà tubum inserta.*

A beautiful plant, native of both sides of the continent of North America: it was found by Mr. Douglas on the north-west coast, and sent by him to England in 1827. Our drawing was made in the Garden of the Horticultural Society in July last.

It is unfortunately impatient of cultivation, being apt to die off, without apparent cause, during its flowering. Naturally it is perhaps perennial; but with us, owing to this cause, it does not survive beyond two years. The best method of cultivating it is found to be in cold damp soil under a wall. It will not live in peat or light soil.

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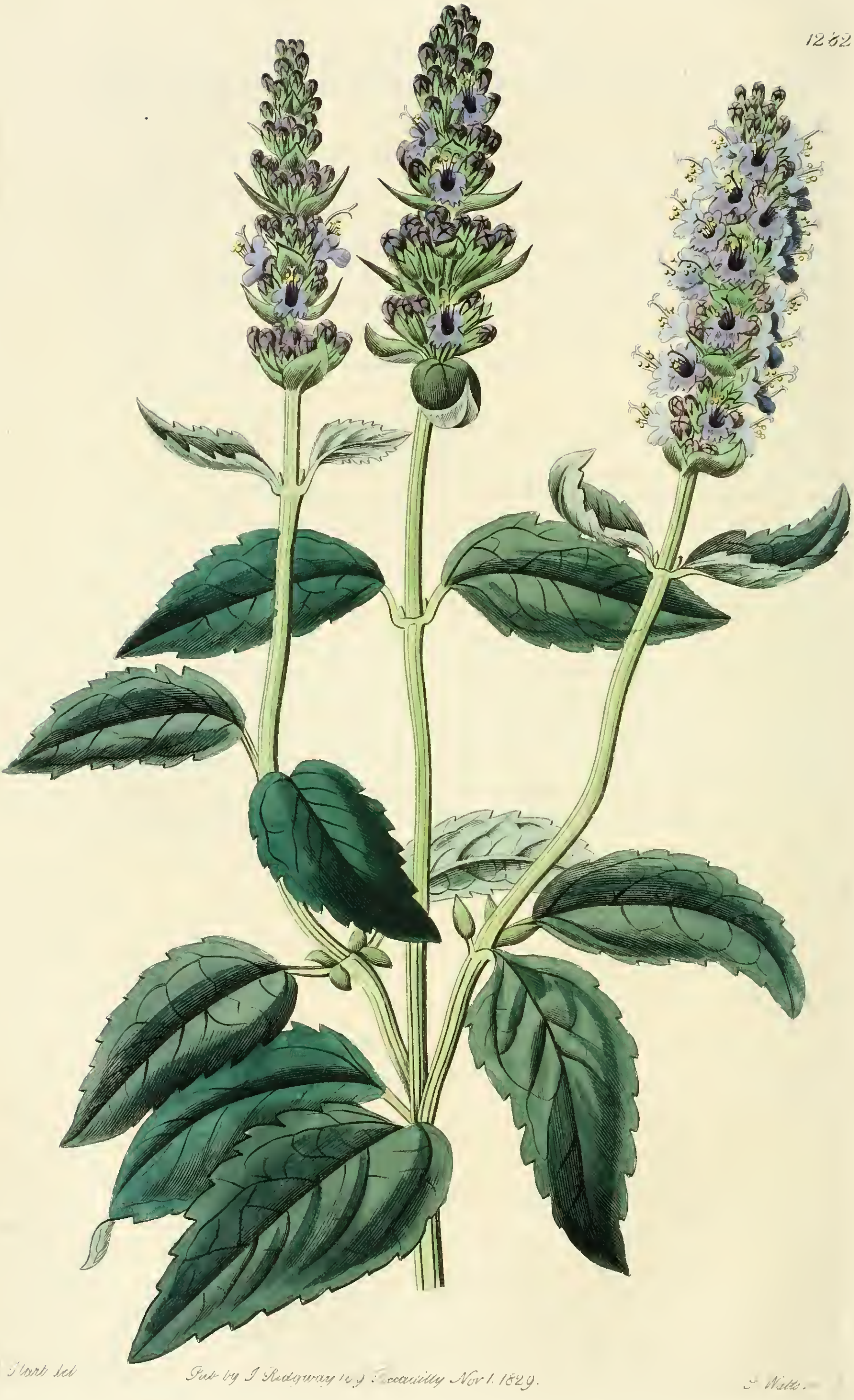
* From Ipomæa, the well-known genus, and ὄψις, resemblance.

That this is the same as Dillenius formerly cultivated at Eltham, and as was afterwards published by Sir James Smith from specimens obtained from Mr. Lee's Nursery, we do not at all doubt. We have examined the Smithian Herbarium in the possession of the Linnæan Society, and the fragments therein preserved are clearly the same as the plant now figured. Mr. Douglas is, however, of opinion that his North-west plant is different from that of Carolina.

With regard to its genus, it has been referred by Linnæus to Polemonium, by Willdenow to Cantua, by Persoon, whom Mr. Douglas follows, to Gilia, and by Michaux to a particular genus called Ipomopsis. The idea of its being a Polemonium has been long abandoned; Cantua differs essentially in its calyx and seeds; and Gilia is a genus founded in the *Flora Peruviana* upon plants with small flowers, of which the stamens are inserted into the recesses of the limb of the corolla, and of which Gilia capitata, now common in our Gardens, is a legitimate species. To none of these, therefore, can this plant be properly referred. Ipomopsis must, therefore, be retained as a genus characterised by the form of its corolla, the absence of foliaceous involucrating bracteæ, and the insertion of its stamens.

J. L.



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J Watts

1282

LOPHÁNTHUS* anisatus.

Anise-scented Lophanthus.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. Labiatæ. § *Satureineæ* Bentham MSS.

LOPHANTHUS.—*Calyx* tubulosus, 15-striatus, 5-dentatus, subæqualis v. apice subincurvus. *Corollæ* tubus calycem subæquans; labia subæqualia; superius erectum emarginatum v. bifidum, inferius 3-fidum, lobis suberectis, medio lato crenato, lateralibus minoribus. *Stamina* 4, exserta, distantia. *Antherarum* loculi paralleli v. demùm subdivergentes.—*Bentham MSS.*

L. *anisatus;* foliis ovatis acutis serratis subtùs canescentibus, verticillis densis spicatis; inferioribus subremotis, calycibus pubescentibus, dentibus ovatis. *Bentham MSS.*
Hyssopus anisatus. *Nutt. gen.* 2. *p.* 27.
Hyssopus discolor. *Desf. cat. hort. par. ed.* 3. *p.* 97.

A handsome hardy perennial, native of borders of thickets on the plains of the Missouri. With us it flowers profusely in the months of July, August, and September, and is remarkable for the strong scent of anise which it yields when slightly bruised. It is a neat species, much better known on the continent than in this country. Our drawing was made in the Garden of the Horticultural Society.

For the following remarks we are indebted to our friend Mr. Bentham, by whom Labiatæ have been made a particular study, and to whom we confidently look for rescuing them from a state of confusion, that has been gradually increasing since the days of Linnæus, until it has become the disgrace of Botany.

J. L.

"This genus is nearly allied to Hyssopus and to Nepeta. It differs from the former by its habit, by the middle division of the lower lip of the corolla, which is broad and crenate, instead of being divided into two entire divergent lobes, and by the anthers, of which the cells are parallel, not divaricate. The form of the corolla, the divergent stamina, and the parallel cells of the anthers, distinguish it from Nepeta.

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* From λόφος, the crest of a helmet, and ἄνθος, a flower; because the flowers have been thought to have a crested appearance.

Among the specimens which I have had occasion to examine, the following species may be referred to this genus : —

1. L. chinensis. Hyssopus lophanthus. *Linn.*

The corolla of this species is described as resupinate ; but that is not the case at least with a specimen from Dahuria sent to Mr. Lindley by Dr. Fischer of Petersburgh.

2. L. urticifolius. Hyssopus urticifolius. *Douglas.*

L. glabra, foliis cordato-ovatis obtusis crenatis, verticillis densè spicatis, laciniis lineari-subulatis, genitalibus longè exsertis. — A larger species than the others of the genus. Flower-spikes terminal, dense, ovate ; flowers of a pale purple, nearly as large as in the L. chinensis. Introduced by Mr. Douglas from the north-west coast of America.

3. L. nepetoides. Hyssopus nepetoides. *Linn.*

4. L. scrofulariæfolius. Hyssopus scrofulariæfolius. *Willd.*

5. L. anisatus, t. 1282.

6. L. multifidus. Nepeta multifida. *Linn.* — From Siberian specimens received by Mr. Lindley from Dr. Fischer.

The Labiatæ with divergent stamina, to which section this genus belongs, might be grouped into two tribes, the *Menthoideæ* and the *Satureineæ ;* of which I take this opportunity of giving the characters, as also of enumerating the genera, along with the characters of such as are new, and amended characters for those which appear to me to require modification.

Tribus 1. MENTHOIDEÆ.

Corollæ tubus calyce brevior vel vix longior; limbus 4-5-fidus, lobis subæqualibus. Stamina distantia, exserta, loculis parallelis vel divaricatis, vel rariùs inclusa, loculis parallelis.

§ 1. *Antheræ 2-loculares, loculis parallelis.*

1. Lycopus. *Linn.* — Calyx æqualis, 5-dentatus. Corolla tubo brevissimo, æqualis, 4-fida. Stamina 2, subexserta, distantia. Antheræ 2-loculares, loculis parallelis.

2. Meriandra. *Benth.* — Calyx 2-labiatus, labio superiore concavo, integro, vel brevissimè 3-dentato, inferiori 2-fido. Corolla subæqualis, 4-fida. Stamina 2, raro 3-4, subexserta, distantia. Antheræ 2-loculares, loculis linearibus distinctis substipitatis.

Species mihi cognitæ 2 ; M. *benghalensis* Benth. in Wall. cat. herb. ind. no. 1526. (Salvia benghalensis *Roxb.*), et M. *strobilifera* Benth. in l. c. no. 1527.

3. Isanthus. *Michx.*—Calyx campanulatus, æqualis, 5-fidus. Corolla tubo brevissimo, æqualis, 5-fida. Stamina 4, exserta, distantia. Antheræ 2-loculares, loculis parallelis.

4. Audibertia. *Benth.* — Calyx campanulatus, subbilabiatus, dentibus 3 superioribus, 2 inferioribus, intùs fauce villosâ. Corolla tubo brevissimo, æqualis, 4-fida. Stamina 4, subexserta, distantia. Antheræ 2-loculares, loculis parallelis.

Species unica A. *pusilla.* Benth. (*Thymus parviflorus.* Req. in ann. soc. nat. 5. p. 386.)

I have dedicated this genus to my friend M. Andibert, of Tarascon, proprietor of one of the most extensive Nurseries in France, who has introduced and naturalised many rare and valuable exotics, and who, in 1820, accompanied M. Requien in his Botanical tour in Corsica, where they first discovered the plant which constitutes this genus.

5. Mentha. *Linn.* — Calyx æqualis, 5-dentatus, intùs fauce nudâ, vel rariùs villosâ. Corolla tubo brevissimo, subæqualis, 4-fida. Stamina 4, distantia, exserta, vel inclusa. Filamenta nuda. Antheræ 2-loculares, loculis parallelis.

This genus thus reduced comprises the European, North American, and Siberian species, the M. *Royleana* Wall. cat. herb. ind. no. 1537, and probably also Mr. Brown's New Holland species, and the M. *javanica* of Blume. I have also observed in Mr. Lindley's Herbarium two new species of true Menthas from Ceylon.

6. Colebrookia. *Roxb.* — Calyx æqualis, 5-partitus, plumosus, maturatione papposus, carpellis adhærens. Corolla subæqualis, 4-fida, lobo superiori emarginato. Antheræ 4, subsessiles, 2-loculares, loculis parallelis.

Spec. 2. C. *oppositifolia* et *ternifolia.* Roxb.

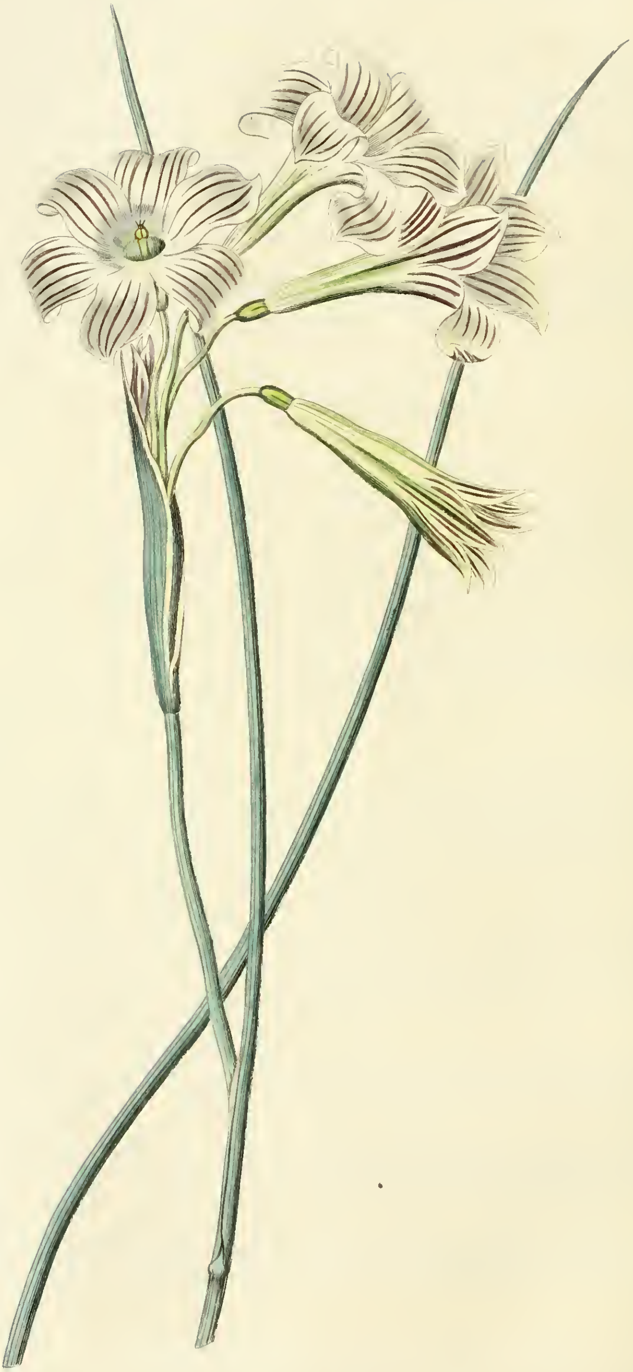
7. Perilla. *Linn.*—Calyx per anthesin subæqualis, 5-fidus, post anthesin 2-labiatus, labio superiore dilatato 3-lobo, inferiori 2-fido. Corolla subæqualis, 5-fida, lobis 3 superioribus, 2 inferioribus. Stamina 4, distantia, corollam æquantia. Antheræ 2-loculares, loculis parallelis.

Species 2. P. *ocymoides* Linn., et P. *macrostachya* Wall. cat. herb. ind. no. 1559.

8. Acrocephalus. *Benth.*—Calyx tubulosus, basi subgibbus, 2-labiatus, labio superiori ovato plano integro, inferiori 4-fido. Corolla calyce brevior, subæqualis, 5-fida, lobis 3 superioribus, 2 inferioribus. Stamina 4, brevia, distantia. Antheræ 2-loculares, loculis parallelis.

Spec. A. *scariosus.* Benth. in Wall. cat. herb. ind. no. 1563. I think it probable that the *Ocymum capitellatum* Linn., and *Ocymum acrocephalum* Blume Bijdr. p. 384, belong to this genus.

1285



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J. Watts sc.

1283

SISYRINCHIUM* odoratissimum.

Fragrant Sisyrinchium.

MONADELPHIA *TRIANDRIA*, OR TRIANDRIA *MONOGYNIA*.

Nat. ord. IRIDEÆ.
SISYRINCHIUM.—*Suprà, vol.* 13. *fol.* 1067.

S. *odoratissimum;* scapo tereti, foliis angustissimis glaucis caulis longitudine, floribus longè pedunculatis nutantibus infundibularibus: laciniis æqualibus.

Caulis *pedalis sesquipedalisve.* Folia *angustissima, glauca, apice subulata.* Spatha *bracteis membranaceo-marginatis: infimâ cæteris magis acutâ.* Flores *plures, odoratissimi, nutantes, longè pedunculati, infundibuliformes, sordidè albi, venis fusco-purpureis striati.* Stamina 3, *filamentis in tubo longo connatis, tubi floris longitudine.* Stigmata 3, *filiformia, staminum longitudine.* Ovarium 3-*loculare, polyspermum.*

For this fragrant species of Sisyrinchium we are indebted to Mr. Mackay, of Clapton, in whose Nursery our drawing was made, in June last.

It is a native of some part of the southern coast of South America, whence it was sent to Mr. Mackay by the collector on board His Majesty's discovery ship, under command of Captain King. It is perfectly hardy, having stood last winter without any protection, when its leaves were not even killed down.

This species approaches Galaxia in the form of its flower; but is so similar to Sisyrinchium in habit, and in every thing except the long tube of the flower, that it is scarcely expedient to separate it from that genus. If others should be of a different opinion, they must unite with it our S. flexuosum, with which it agrees in the form of the flower.

We have here a new instance of what is called the *certainty* and *precision* of the Linnæan system of Botany.

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* Σισυρίγχιον of the Greeks was either the little bulbous plant now called Iris sisyrinchium according to Sprengel, or Trichonema bulbocodium according to Sibthorp. It was so named because the roots were grubbed up by swine.

Sisyrinchium appears to us to belong to Monadelphia Triandria, and it is so stationed by some Linnæan Botanists; yet others of great authority place it in Triandria Monogynia. We will not pretend to decide between these conflicting opinions; but we really wonder that gentlemen should be still found, with this and hundreds of similar cases staring them in the face, to talk gravely of the peculiar *precision* and *certainty* of the sexual system. No one pretends to claim this character of peculiar *certainty* and *precision* for the natural system; but to ascribe it exclusively to the Linnæan is notoriously absurd; as if the very clever artificial contrivance of the illustrious Swede, the utility of which is, however, most extravagantly overrated, were exempt from the imperfections inherent in all human affairs. But what amuses us the most is, that while Linnæan Botanists are thus anxiously endeavouring to maintain the ground, which they cannot avoid perceiving is rapidly slipping from beneath them, they are slily adopting that very system they deprecate, and adopting it by a sort of patch-work process, which has the peculiar advantage of being particularly useless. (See *Sprengel's Syst. Veg. passim* in the arrangement of genera.) With us, so completely will prejudice blind men's perceptions, one of the most intelligent and amiable men that the age has seen, has announced himself a defender of the Linnæan faith, in a splendid work, bearing for its name the somewhat singular title of *Monandrian* Plants *of the Order Scitamineæ!* which is written from beginning to end *upon the principles of the Natural System.*

In no other country than Great Britain would remarks of this nature be necessary, if we except a few of the southern kingdoms of Europe, in which science does not particularly flourish. We trust they will soon be superfluous among ourselves.

Ah! pereant, si quos janua clausa juvat.

Stem a foot or a foot and a half high. *Leaves* very narrow, glaucous, subulate at the apex. *Spatha* consisting of bracteæ membranous at the margin, of which the lowermost is sharper than the others. *Flowers* several, very fragrant, nodding, on long stalks, funnel-shaped, dirty white, with brownish-purple veins. *Stamens* 3; the filaments united in a long tube the length of the flower. *Stigmas* 3, filiform, the length of the stamens. *Ovarium* 3-celled, many-seeded. J. L.

§ 2. *Antheræ 2-loculares, loculis divaricatis.*

9. Elsholzia. *Willd.*—Flores spicati et bracteæ foliaceæ secundi. Calyx æqualis, 5-dentatus. Corolla subæqualis, 5-fida, lobis 3 superioribus, 2 inferioribus. Stamina 4, distantia. Antheræ lineares, 2-loculares, loculis divaricatis.

10. Cyclostegia. *Benth.*—Florum spica strobiliformis. Bracteæ membranaceæ, venosæ, margine ciliatæ, imbricatæ, cyathiformes, ex duâbus oppositis connatis constantes. Calyx æqualis, 5-dentatus. Corolla 4-fida, lobis subæqualibus, superiori suberecto emarginato, inferioribus subpatentibus. Antheræ ovatæ, loculis confluentibus.

Spec. C. *strobilifera.* Benth. in Wall. cat. herb. ind. no. 1562.

11. Aphanochilus. *Benth.*—Calyx subæqualis, 5-dentatus. Corolla tubo calycem subæquante, breviter 4-fida, lobo superiori suberecto subconcavo emarginato, inferioribus patentibus. Stamina 4, sæpiùs exserta, distantia. Antherarum loculi divergentes vel divaricati, demùm confluentes.

Species omnes Indicæ. 1. A. *blandus.* Benth. in Wall. cat. herb. ind. no. 1550. (Mentha blanda. *Wall.* herb. 1823, at vix *Dec.* ic. hort. gen.) 2. A. *fœtens.* Benth. in l. c. no. 1551. 3. A. *incisus.* no. 1552. (Mentha blanda. *Lindl.* trans. Hort. Soc. vol. 6, p. 275). 4. A. *flavus.* no. 1553. 5. A. *polystachyus.* no. 1554. 6. A. *eriostachyus.* no. 1555. 7. A. *pilosus.* no. 1556. 8. A. *paniculatus.* no. 1557.

§ 3. *Antheræ terminales 1-loculares, rimâ transversali dehiscentes.*

12. Dysophylla. *Blume.*—Calyx æqualis, 5-dentatus. Corolla tubo brevissimo, subæqualis, 4-fida, lobo inferiori subpatente. Stamina 4, exserta, distantia. Filamenta barbata. Antheræ terminales, 1-loculares, rimâ transversali dehiscentes.

Species omnes Indicæ. 1. D. *velutina.* Benth. in Wall. cat. herb. ind. no. 1538. 2. D. *quadrifolia.* Benth. in l. c. no. 1539. (Mentha quadrifolia. *Roxb.*) 3. D. *linearis.* no. 1540. 4. D. *cruciata.* no. 1541. 5. D. *stellata.* no. 1542 (Mentha stellata. *Lour.*, M. quaternifolia. *Roth.*) 6. D. *ramosissima.* no. 1543. 7. D. *verticillata.* no. 1544. (Mentha verticillata. *Roxb.*, non *Hook.* bot. mag. no. 2907, nec *Don.* prod. fl. Nep.) 8. D. *crassicaulis.* no. 1545. 9. D. *pumila.* no. 1546 (Mentha pumila. *Graham*, M. verticillata. *Hook.* l. c.) 10. D. *myosuroides.* no. 1547 (Mentha myosuroides. *Roth.*) 11. D. *auricularia.* Blume Bijdr. p. 826. 12. D. *strigosa.* Benth. in l. c. no. 1549.

Blume gives as part of the generic character, the connivence of the teeth of the calyx; a character very difficult to observe in dried specimens, and which does not appear to me to run through all the above species, which are too closely allied together to be generically separated. The form of the anthers, and the bearded stamina, are constant in the whole of them. Blume describes the stamina as declinate; but if they are so in the living state it can only be in a very slight degree. This genus, different in habit both from Mentha and Pogostemon, is intermediate between them in characters.

13. Pogostemon. *Desf.*—Calyx æqualis, 5-dentatus. Corolla 4-fida, subbilabiata, labio superiore 3-fido patente, inferiori integerrimo acuto subdeflexo. Stamina 4, exserta, distantia, subdeclinata. Filamenta barbata. Antheræ terminales, 1-loculares, rimâ transversali dehiscentes.

Species omnes Indicæ. 1. P. *plectranthoides.* Desf. 2. P. *parviflorum.* Benth. in Wall. cat. herb. ind. no. 1531. 3. P. *Heyneanum.* Benth. in loc. cit. no. 1532. 4. P. *glabrum.* no. 1533. 5. P. *vestitum.* no. 1534. 6. P. *rotundatum.* no. 1535.

Blume (*Bijdragen*, p. 827) describes another species, under the name of P. *menthoides*, of which the filaments are without the hairs I have found on every other species both of Pogostemon and Dysophyllum. If he be right in his description, either his plant must belong to some other genus, or the character of this one must be modified accordingly; but not having seen his plant, I cannot determine this point. This genus has usually the stamina slightly declinate, and on this account would belong to the Ocymoideæ; but the declination is in general so slight as to be scarcely perceptible in dried specimens; and the close connexion between the two latter genera (which cannot be separated from one another) and Mentha has induced me to place them in this tribe.

Tribus 2. SATUREINEÆ.

Corolla tubo calycem subæquante, bilabiata, labiis subæqualibus, superiori erecto subplano. Stamina 4, distantia, antheris 2-locularibus, loculis parallelis vel rarò divaricatis.

§ 1. *Antherarum loculi paralleli.*

14. Bystropogon. *L'Hér.*—Flores dichotomo-paniculati. Calyx 10-striatus, campanulatus, æqualis, 5-dentatus, fauce intùs villosâ. Corolla tubo calycem subæquante, bilabiata, labio superiori erecto plano emarginato, inferiori patente trifido. Stamina 4, distantia. Antherarum loculi paralleli.

15. Pycnanthemum. *Michx.*—Flores densè capitati, bracteis involucrati. Calyx 15-nervis, ovato-tubulosus, dentibus 5 subæqualibus, fauce intùs nudâ. Corolla tubo

calycem subæquante, bilabiata, labio superiori erecto plano integro vel brevissimè emarginato, inferiori patente trifido. Stamina 4, distantia. Antherarum loculi paralleli.

I do not think that the genus Brachystemum *Michx.* can be separated from this one.

16. Satureïa. *Linn.* — Flores verticillati vel capitati. Calyx 10-striatus, æqualis, 5-dentatus, fauce intùs nudâ. Corolla tubo calycem subæquante, bilabiata, labio superiori suberecto plano emarginato subbifido, inferiori patente trifido. Stamina 4, distantia. Antherarum loculi paralleli.

The Satureïa Thymbra *Linn.* has the stamina approximate under the upper lip, and must therefore be excluded from this genus. The section Thymaria (*Dec.* et *Dùby* bot. gall. p. 370) cannot, in my opinion, be distinguished from Thymus. The section Sabattia, *Mœnch*, forms my genus Micromeria. The genus Satureïa would thus be confined to the S. hortensis, montana, and perhaps one or two others among those which I have not yet had an opportunity of examining.

17. Micromeria. *Benth.* — Flores verticillati vel capitati. Calyx 10- vel 15-striatus, tubulosus, dentibus 5 subæqualibus, intùs fauce villosâ. Corolla tubo calycem subæquante, bilabiata, labio superiori erecto plano emarginato, inferiori patente trifido. Stamina 4, distantia. Antherarum loculi paralleli.

This genus comprehends the Sabattia of Mœnch (a name which I could not adopt, on account of the older genus of the same name in the order of Gentianeæ), and most of the species of Persoon's section Zygis of the genus Thymus; probably also the South American Bystropogons with verticillate flowers.

18. Thymus. *Linn.* — Flores verticillati vel capitati. Calyx 10-striatus, ovato-tubulosus, bilabiatus, labio superiori 3-dentato, inferiori bifido, intùs fauce villosâ. Corolla tubo calycem subæquante, bilabiata, labio superiori erecto subplano emarginato, inferiori patente trifido. Stamina 4, distantia. Antherarum loculi paralleli.

This genus would thus be reduced to Persoon's section *Serpyllum.*

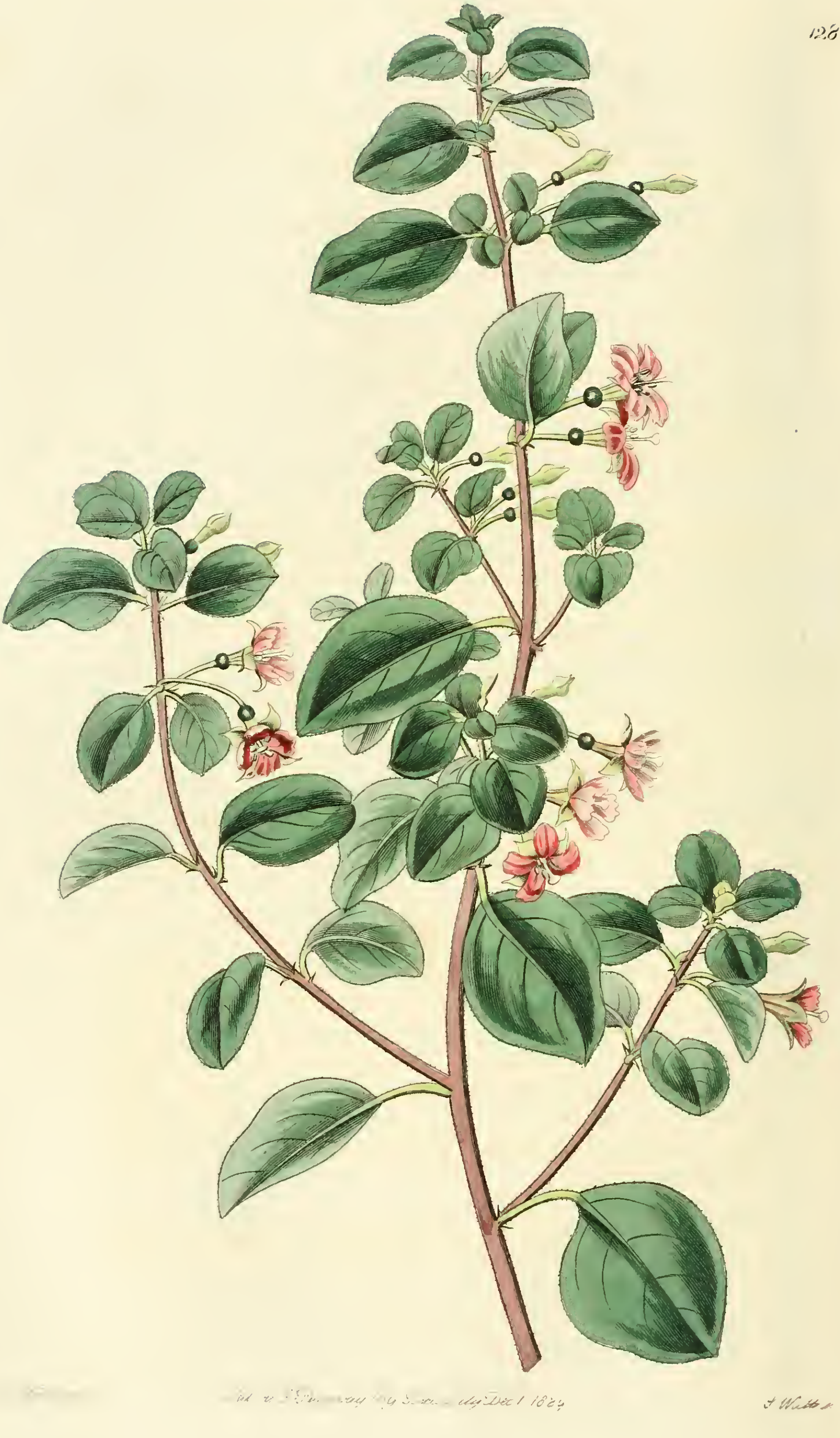
19. Origanum. *Linn.*—Florum spicæ tetragonæ, strobiliformes, bracteis imbricatis. Calyx varius. Corolla tubo calycem subæquante, bilabiata, labio superiori erecto subplano emarginato, inferiori patente trifido. Stamina 4, distantia. Antherarum loculi paralleli.

These six genera are so closely allied as to be scarcely distinguishable. The corolla and stamina are nearly the same in all, the length of the stamina being too variable even in the same species to serve as a generic character. The inflorescence and calyx alone, characters of minor importance in the order of Labiatæ, can serve to separate them.

20. Lophanthus. *Benth.* — Suprà.

§ 2. *Antherarum loculi divaricati.*

21. Hyssopus. *Linn.*—Calyx tubulosus, subæqualis, 5-dentatus. Corolla tubo calycem subæquante, bilabiata, labio superiori erecto emarginato, inferiori trifido: lobis lateralibus suberectis, medio emarginato subbifido, laciniis divergentibus. Stamina 4, exserta, distantia. Antherarum loculi lineares, divaricati."



Pub. by J. Ridgway 169 Piccadilly Dec 1 1829

J. Watts sc.

FUCHSIA* thymifólia.

Thyme-leaved Fuchsia.

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OCTANDRIA *MONOGYNIA.*

Nat. ord. ONAGRARIÆ.
FUCHSIA.—Suprà, vol. 10. *fol.* 847.

F. *thymifolia;* ramis pubescenti-hirtellis, foliis parvis oppositis ovatis aut subrotundo-ovatis obtusis subintegerrimis suprà hirtellis subtùs glabriusculis, calyce subinfundibuliformi: laciniis oblongis angustato-acutis, petalis ovato-oblongis obtusis integris (subrotundis patentissimis undulatis), staminibus inclusis.—*Kunth in Humb. et Bonpl. nov. gen. et species plantarum, vol.* 6. *p.* 104. *tab.* 535. *Dec. prodr.* 3. 37.

Lopezia thymifolia. *Willd.*, according to *Link in Schultes mantissa*, 50.

Caulis *ramosus, frutescens, ramis debilibus, teretibus, cinereis, pube minimâ obtectis.* Folia *ovata, obtusa, longè petiolata, utrinque minutè pubescentia, subtùs pallidiora; nunc opposita, nunc subopposita, sæpè alterna;* stipulæ *minutissimæ.* Flores *parvi, axillares, solitarii, pedunculis petiolorum longitudine, capillaribus.* Calycis *tubus infundibularis, limbo acutè 4-fido paulò longior, purpurascens.* Petala *oblonga, plana, patentissima, undulata, obtusa, primùm pallidè rosea, dein intensiùs rosea, mox purpurea.* Stamina *subinclusa.* Stigma *longè exsertum, capitatum, indivisum.*

We had lately the gratification of publishing a figure of the lovely Fuchsia microphylla of Mexico: we are now indebted to the same rich store of new plants for the opportunity of figuring another very interesting species of the genus, the F. thymifolia of Kunth. It is a native of high land in Mexico, whence it was procured by Robert Barclay, Esq. Humboldt found it near Pazcuaco at an elevation of about 6000 feet.

It is a half-hardy shrub, remarkable for its soft entire leaves and changeable flowers, the petals of which are not rolled together, as is usually the case, but spread open. The blossoms are at first pale-greenish rose colour, gradually changing to deep red, so that there are many different hues upon the plant at the same time. It propagates very readily by cuttings, and will soon become a common plant. It flowers continually during all the summer months.

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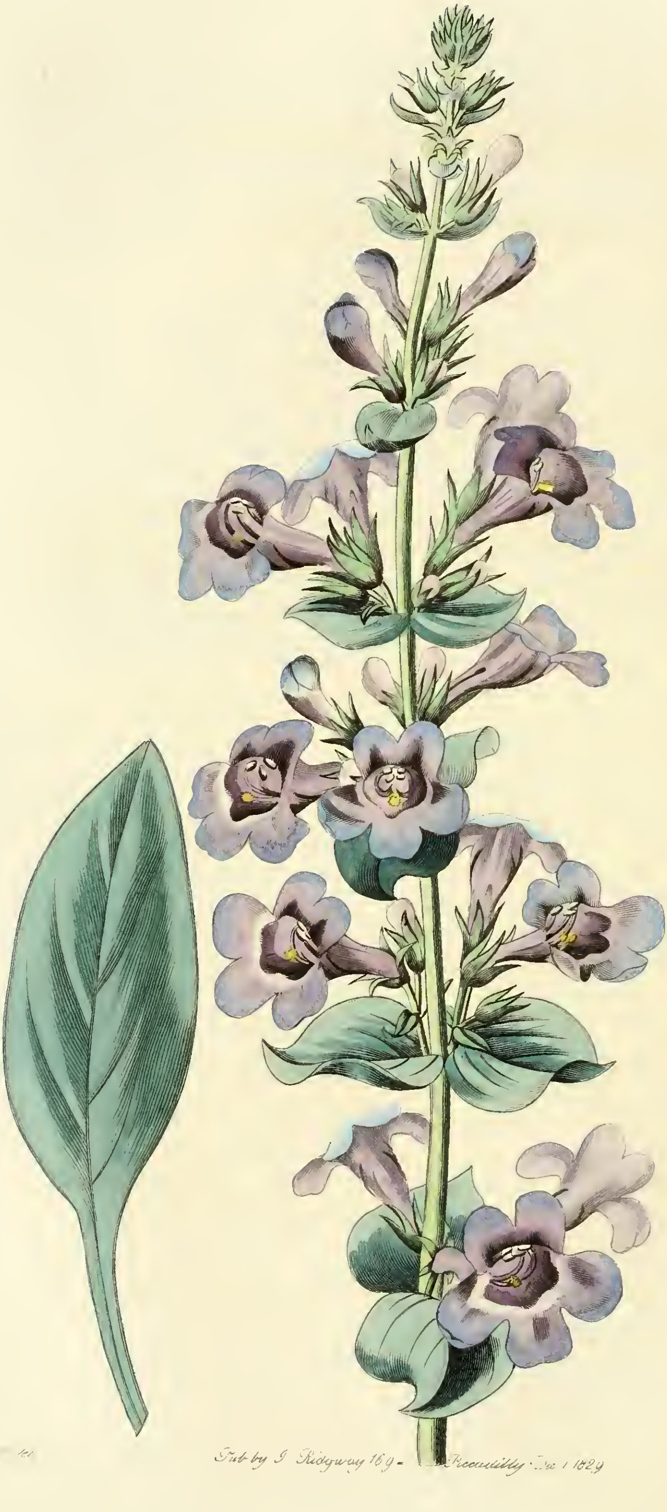
* See fol. 1269.

Stem branched, shrubby; *branches* weak, round, ash-colour, covered with very minute down. *Leaves* ovate, obtuse, on long stalks, covered on both sides with minute pubescence, paler beneath; sometimes opposite, sometimes nearly opposite, often quite alternate; *stipulæ* very minute. *Flowers* small, axillary, solitary, with the peduncles the length of the petioles, and capillary. Tube of the *calyx* funnel-shaped, rather longer than the limb, which is divided into four sharp-pointed pieces. *Petals* oblong, flat, very much spreading, wavy, obtuse. *Stamens* almost, but not quite, enclosed in the calyx. *Stigma* a long way protruded, capitate, undivided.

J. L.



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Pub by J Ridgway 169 Piccadilly Dec 1 1829

J Watts sc

PENTSTÉMON* acuminátum.

Pointed-leaved Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. Scrophularineæ.
PENTSTEMON.—Suprà, vol. 13. *fol.* 1121.

P. *acuminatum;* caule ascendente foliisque glabris valdè glaucis, horum radicalibus ovato-oblongis longè petiolatis integerrimis subcoriaceis, caulinis bracteisque cordatis acuminatis sessilibus amplexicaulibus, fasciculis florum subsessilibus, sepalis acuminatis glaberrimis, corollis tubo infundibulari: fauce inflatâ, limbi laciniis latis retusis.

P. acuminatum. *Douglas in herb. Hort. Soc.*

Caulis *ascendens, pedalis sesquipedalisve, imo bipedalis, glaberrimus, valdè glaucus, ut et folia et omnes aliæ partes.* Folia radicalia *erecta, in basin caulis ascendentia, demùm in caulina mutata.* Bracteæ *venosæ, coriaceæ: inferiores floribus longiores.* Flores *in fasciculis subsessilibus, intrà bracteas axillaribus, dispositi, purpurei, ad marginem amœnè cyanei.* Calyces *coriacei, sepalis valdè acuminatis, ampliantibus.* Corolla *calyce triplò longior, glaberrima, tubo infundibulari paululùm arcuato, limbo valdè obliquo: laciniis latis, rotundatis, v. retusis.* Filamentum sterile *tubo brevius, apice leviter pilosum, aduncum.*

We have here the gratification of making known a rival of the beautiful P. speciosum, published some time ago; inferior to it in stature, but exceeding it in beauty of colouring and neatness of appearance. It is a native of the barren sandy plains of the Columbia; growing there, as it appears from Mr. Douglas's specimens, with the lower part of its stems and its radical leaves immersed in sharp coarse white sand. It flowers from June to August. Our drawing was made in the Garden of the Horticultural Society, to which it had been introduced in 1827.

This is by far the most difficult to cultivate of all its

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* See fol. 1245.

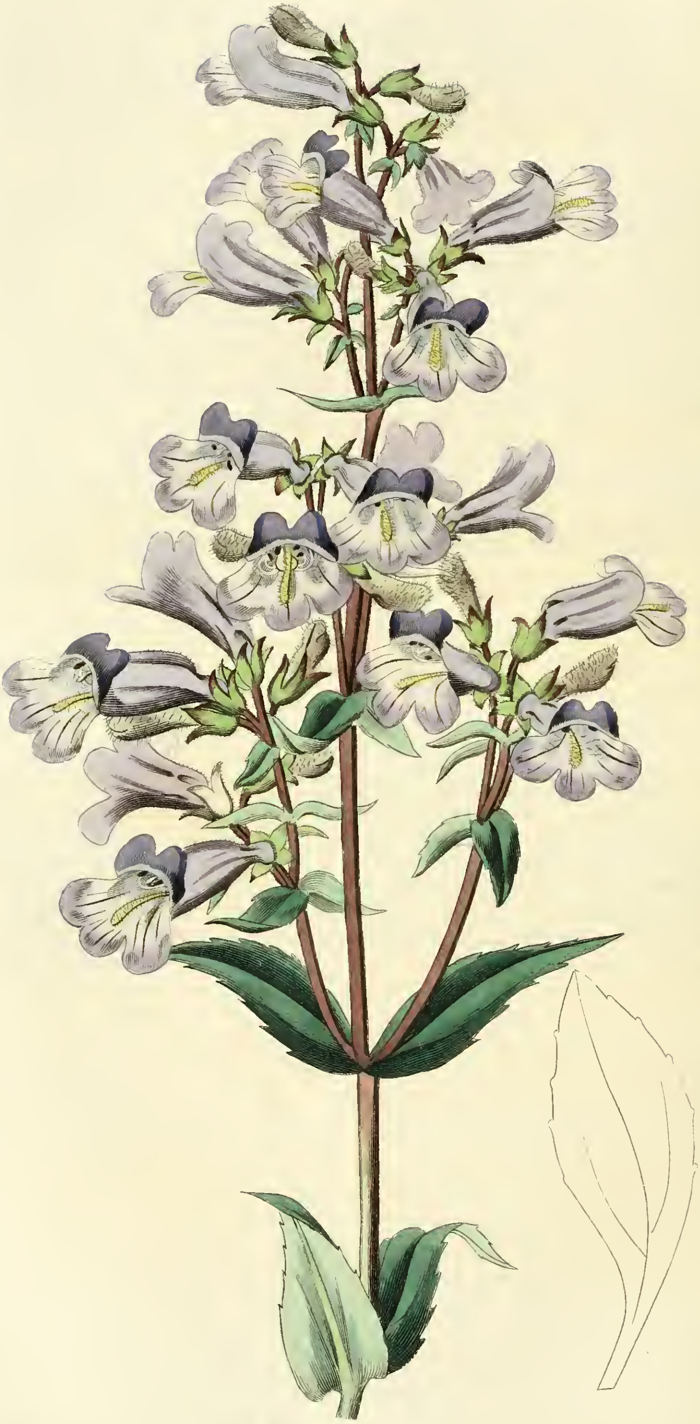
genus. No soil has yet been found which suits it: it flowers abundantly, but will not produce seed. It is to be feared, that, unless a fresh supply is procured from N. W. America, the species will be lost to our Gardens.

Stem ascending, about a foot high, or a foot and a half, sometimes even two feet, but this is unusual; very glaucous, as are the leaves, and all the other parts. *Radical leaves* erect, rising up the base of the stem, before they are changed into cauline ones. *Bracteæ* veiny, coriaceous; the lowermost longer than the flowers. *Flowers* arranged in subsessile fascicles, which are axillary in the bracteæ, purple, bordered with lively blue. *Calyxes* coriaceous, the sepals very much acuminate, growing larger after flowering. *Corolla* thrice as long as the calyx, quite smooth; the tube funnel-shaped, slightly arched; the limb very oblique, with broad, rounded, or retuse segments. *Sterile filament* shorter than the tube, slightly hairy, and hooked at the point.

J. L.

NOTE upon *Teucrium orchideum*, fol. 1255.

Mr. Don has obligingly pointed out to us that this plant is evidently the T. heterophyllum of *Cavanilles, icon. vol.* 6. *p.* 56. *t.* 577.; a circumstance to which we had not adverted. It is not, however, the T. heterophyllum of L'Héritier, to which the name is usually applied. Teucrium orchideum will therefore continue to stand as a distinct species, with the synonym of Cavanilles added to it.



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J Watts

PENTSTÉMON* glaúcum.

Glaucous Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ.
PENTSTEMON.—Suprà, vol. 13. *fol.* 1121.

P. *glaucum;* caule herbaceo glabriusculo, foliis omnibus glaberrimis: radicalibus lanceolatis petiolatis integerrimis denticulatisve; caulinis bracteisque ovato-lanceolatis sessilibus amplexicaulibus, paniculâ thyrsoideâ, corollis inflatis calycibusque extùs glanduloso-pubescentibus, filamento sterili porrecto barbato.

P. glaucus. *Graham in Jamieson's journal, July* 1829, *p.* 348.

P. gracilis. *Bot. mag.* 2945, *as far as the* description *is concerned, but not the* figure.

A dwarf species, thriving in common soil, flowering in profusion in August and September, and propagated by division of the roots and by seeds. It grows about a foot high.

The plant from which our figure of this interesting species was taken, was sent from the Botanic Garden, Edinburgh, to that of the Horticultural Society, as a Pentstemon, at that time unnamed, which had been raised from the seeds collected by Mr. Drummond, during Dr. Richardson's last journey in Arctic America. It was afterwards published in the work above quoted, along with an excellent description, as a new species, by Dr. Graham. Subsequently, our friend Dr. Hooker has referred the species to P. gracile of Nuttall, in which he is undoubtedly mistaken, as we trust to shew.

The sources from which the materials for P. gracile in the *Botanical Magazine* were taken, were, first, a plant which flowered in the Glasgow Garden, it does not appear whence received, but which afforded the specimen from which the figure was made; and, secondly, Dr. Graham's description above referred to. Now, these two are not in accordance with each other. Dr. Graham says, that the radical leaves of his plant are perfectly entire; that the stem leaves are dilated at the base and amplexicaul; that the peduncles are elongated as well as the compound filiform pedicels; that the bracteæ are ovate; that the corolla is yellow at the apices of its lobes; that the upper surface of the lower lip has long yellowish hairs; and, finally, that the barren filament dips to the lower side of the corolla, and is covered with yellowish hairs. But Dr. Hooker's figure is totally at variance with all this in every particular: his radical leaves are strongly serrated, and although this is occasionally slightly the case with Dr. Graham's plant, yet it is not a usual character; the stem leaves are neither dilated at the base nor amplexicaul; the peduncles are not elongated, but are, on the contrary, particularly short; there is no yellow at the apices of the lobes of the corolla; and, finally, there is no appearance of yellow hairs upon either the lower lip of the corolla, or upon the barren filament. But Dr. Hooker adds, that his plant agrees with specimens collected by Mr. Douglas about Red River, which are also identical with Mandan specimens named by Nuttall himself. Having, fortunately, the advantage of referring to Mr. Douglas's Red River specimens in the possession of the Horticultural Society, we find them indeed agreeing most exactly with the figure of the Glasgow plant, but not at all with those in our own Herbarium of Dr. Richardson's plant.

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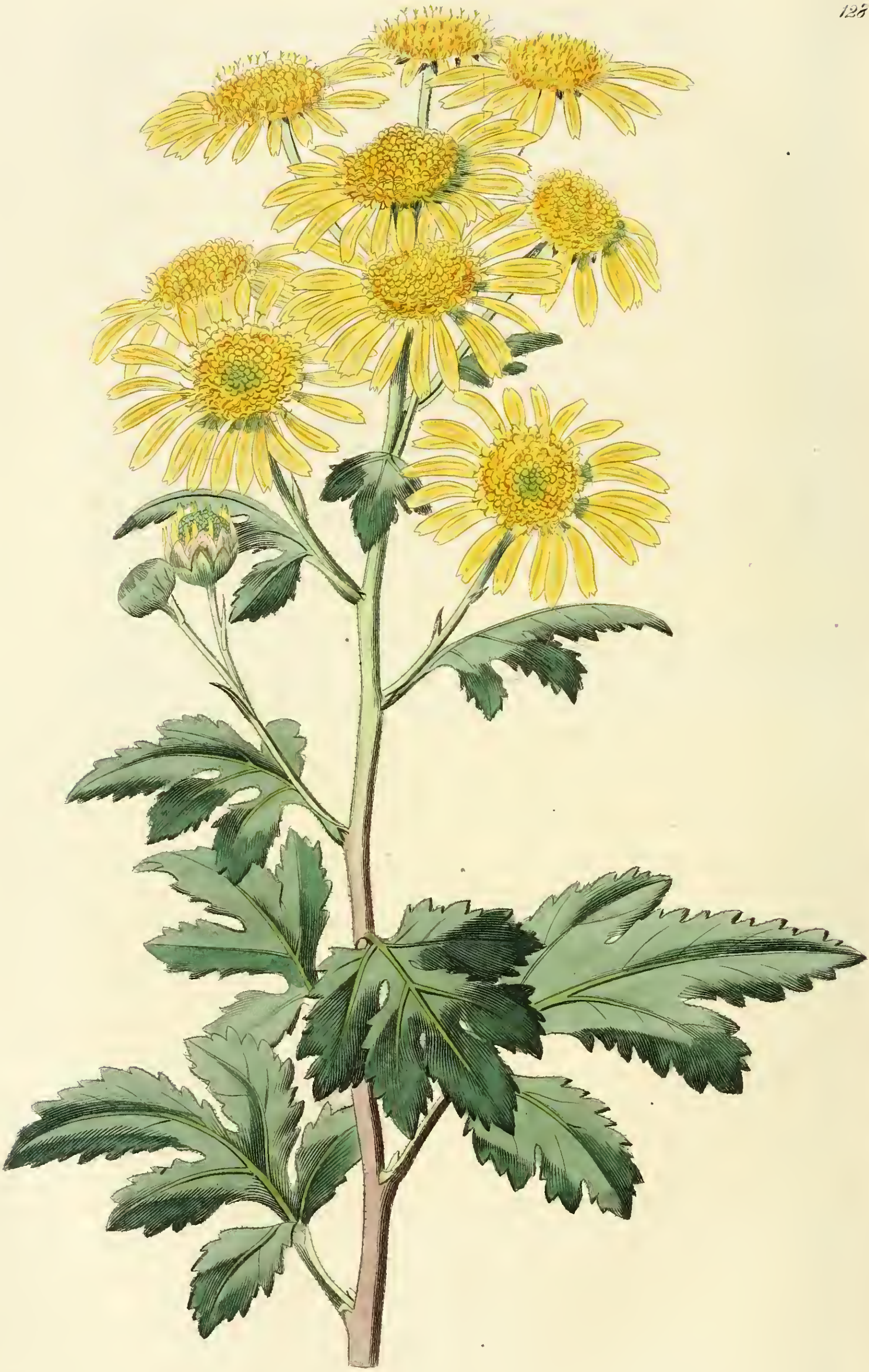
* See fol. 1245.

The explanation of all this is clearly, that the figure in the *Botanical Magazine* is of P. gracile,— of which it is, by the way, an excellent representation, — while the description is of P. glaucum; and that these two species are not the same, as Dr. Hooker has concluded.

J. L.

1287



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1287

CHRYSANTHEMUM* indicum.

Indian Chrysanthemum.

SYNGENESIA *POLYGAMIA SUPERFLUA.*

Nat. ord. Compositæ.
CHRYSANTHEMUM.—Suprà, vol. 1. *fol.* 4.

C. *indicum;* foliis flaccidis petiolatis pinnatifidis crebrè dentatis; supremis integerrimis, radio calyce paulò longiore, caule fruticoso. *Sabine in Linn. trans.* 14. 144.
C. indicum. *Linn. sp. pl.* 2. 889.
Small yellow single Chrysanthemum. *Sabine in Hort. trans.* 5. 159.
Chr. tripartitum. *Sweet's flower garden, t.* 193.
β. flore pleno. *Hort. trans. vol.* 4. *tab.* 13.

This is the plant which Linnæus intended by the name of Chrysanthemum indicum, and is probably a distinct species from the cultivated double Chrysanthemum of the Gardens; as has been long since stated by Mr. Sabine, to whose paper in the *Linnæan Society's Transactions* we refer those who are interested in a critical investigation of the synonyms of either kind. In that work the subject is so nearly exhausted, that we can have little to add, beyond this, that we agree in opinion, that the left and upper right-hand specimens in the Linnæan Herbarium both belong to the species which is the subject of the accompanying plate; and that the lower left-hand specimen is probably a morsel of some variety of Chrysanth. sinense. A specimen with double flowers, gathered at Banda by Mr. Christopher Smith, and preserved in the Smithian Herbarium, without having been determined, is possibly

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* From χρυσὸς, gold, and ἄνθος, a flower; in allusion to the yellow colour of the flowers of many species.

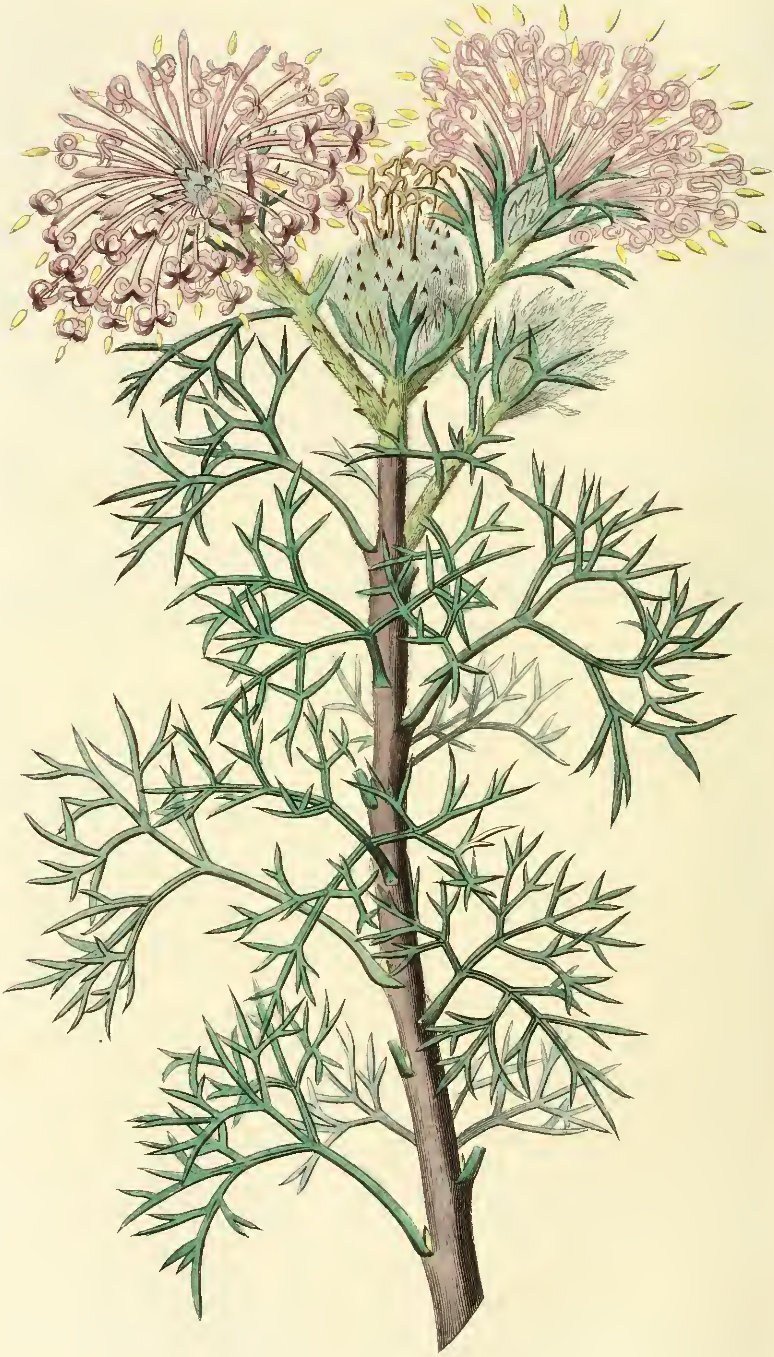
C. indicum also; but the specimen figured in the *Horticultural Transactions*, vol. 4. tab. 12. is no doubt distinct both from C. indicum and sinense. There are specimens in the Smithian Herbarium of what is probably this plant, but so badly preserved that it is difficult to determine them accurately; they have no mark to indicate whence they were received. Mr. Brown's specimens, from which the drawing above alluded to was made, were from China; and we are in possession of a perfect specimen of the same plant gathered wild near Macao. This species, which should be called C. *Sabini*, appears to be procumbent, has smaller flowers, and its ray is *white*, not yellow.

Introduced by Mr. Brookes, of Ball's Pond, about the year 1821: it requires the same management as the common Chinese Chrysanthemums, but blossoms as late as January.

The double variety figured in the *Horticultural Transactions* is now known in our Gardens under the name of the Double yellow Indian Chrysanthemum.

J. L.

1288.



M. Hart del.

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J. Watts sc.

1288

ISOPÓGON* formósus.

Handsome Isopogon.

TETRANDRIA *MONOGYNIA.*

Nat. ord. PROTEACEÆ.
ISOPOGON.—Suprà, vol. 11. *fol.* 900.

I. *formosus;* foliis bipinnatifidis subtriternatis filiformibus suprà canaliculatis: laciniis divaricatis, ramulis tomentosis, perianthiis glabris: laminis apice pilosiusculis. — *R. Brown in Linn. trans.* 10. 72. *Prodr.* 1. 366. *&c.*

Frutex *rigidus, ramosus, ramis murinis: vetustis nudiusculis, junioribus sericeo-villosis.* Folia *sæpiùs triternata, dura, teretia, pungentia, suprà sulcata. glabra, laciniis divaricatis.* Capitulum *subsessile, terminale, foliis involucratum.* Squamæ *obovatæ, cuspidatæ, extùs lanatæ.* Calyx *mox deciduus, tubo gracili glabro, limbo quadrifido, laciniis spatulatis, purpureis, apice extremo villosis, intùs antheriferis, infrà antheras bicallosis.* Ovarium *villosissimum;* stylus *filiformis, apice biarticulatus, articulo inferiore luteo, pubescente, clavato, superiore ovato, elongato, glabro, ad apicem stigmatifero.*

This, the most beautiful of its genus, is said to have been introduced so long since as the year 1805 to the Kew Garden. As far, however, as the public is concerned, the date of its introduction may be more properly fixed in 1824, when it was raised by Mr. Mackay, from seeds collected in the neighbourhood of Lucky Bay, by Mr. Baxter, on his first visit to the west coast of New Holland. It is right, that in all questions about the period at which plants have been introduced, this distinction should be borne in mind, and that the world should be aware that the introduction of a plant to his Majesty's Garden at Kew, is a very different affair from its introduction to Great Britain. An object cannot be properly said to be introduced from one country to another, unless it is afterwards disseminated by such means as the introducer possesses; a practice which is adopted in every establishment in the world, save in that one which ought to set an example to all others.

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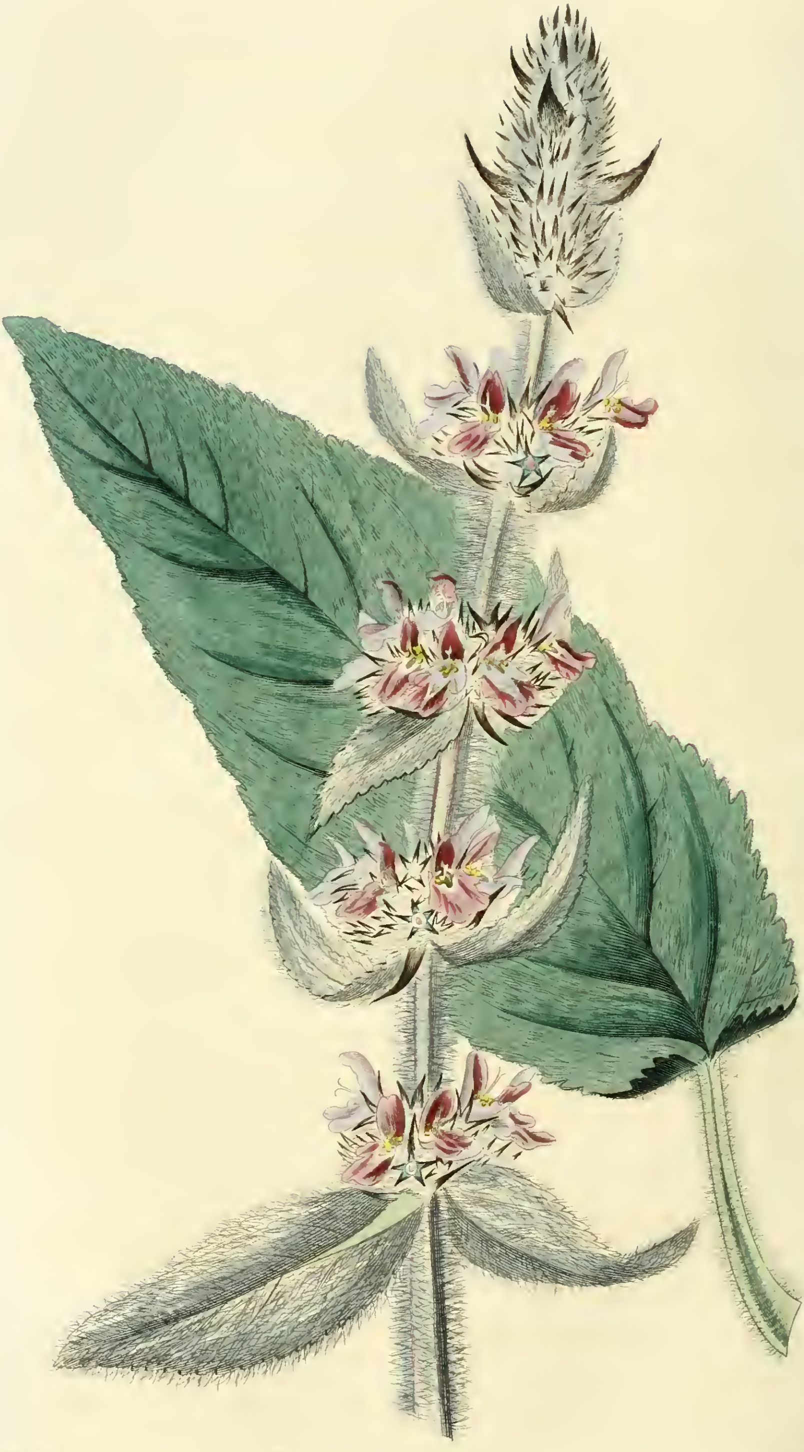
* From ἴσος, equal, and πώγων, a beard; so named because the long hairs of the fruit are placed equally all over it, and do not arise from one side only, as in the neighbouring genus Petrophila.

A greenhouse shrub, remarkable for its hard, neat, rigid, divided leaves, and heads of purple flowers. Propagated by ripened cuttings, struck under a bell-glass. It blossoms in July. Our drawing was made this year, in Mr. Mackay's Nursery at Clapton.

J. L.

1289



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S Watts sc.

STÁCHYS germánica; *var.* pubéscens.

Pubescent German Stachys.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. LABIATÆ. § *Nepeteæ.*

STACHYS. L.—*Calyx* ovato-campanulatus, 10-nervis, æqualis, 5-dentatus, intùs fauce nudâ vel vix pilosâ. *Corolla* tubo calycem subæquante, 2-labiata, labiis subæqualibus, superiori subpatente integro fornicato vel subplano: inferiori patente 3-fido, lobo medio integro vel emarginato. *Stamina* 4, sub labio superiori ascendentia. *Antheræ* 2-loculares, loculis divaricatis. *Stylus* apice subæqualiter 2-fidus. *Achenia* sicca, lævia.—*Benth.*

St. *germanica;* canescens, verticillis multifloris, foliis ovatis; serraturis imbricatis, caule lanato. *Pers. synops.* 2. 123.
Var. *pubescens;* foliis densè villosis, minùs serratis.
" St. pubescens. *Schrad.*" *Hort. Götting.*

This was sent to the Horticultural Society from the Göttingen Garden, under the name of S. pubescens: it appears to be a mere variety of S. germanica, with thicker leaves than usual.

It is a hardy perennial, flowering from June to the end of August.

Mr. Bentham having kindly supplied us with a continuation of his very valuable and interesting characters of the genera of Labiatæ, we gladly take this opportunity of printing it, being desirous that not a day should be lost in putting Botanists in possession of information which is of such great importance to them.

J. L.

" This genus, which appears to be spread over nearly the whole of the globe, is a numerous and very natural one, and consequently difficult in regard to the distinction of its species. The generic character brings it nearest to Betonica and to Chaiturus: it differs from the former chiefly by the shorter tube of the corolla, and the divaricate cells of the anthers. Chaiturus is easily distinguished from Stachys by its habit and inflorescence; yet the erect position of the upper lip of the corolla, and the shorter stamina scarcely protruding from the tube of the corolla, are the only characters I have been able to find.

The S. lavandulæfolia has been established as a separate genus, under the name of Zietenia, by Gleditsch, who, according to Persoon (*Ench.* 2. *p.* 124), distinguishes it from Stachys by the long subulate laciniæ of the calyx, and the abortion of three of the nuts; but neither of these characters appears to me sufficiently important for the generic separation of plants otherwise resembling each other.

The genus Stachys belongs to the Labiatæ with ascendent stamina, which I should propose to divide into four tribes, the *Ajugoideæ*, *Monardeæ*, *Nepeteæ*, and *Prasieæ;* the remainder of the Labiatæ, those with declinate stamina, forming a single tribe, the *Ocymoideæ.* I now proceed to continue the enumeration of the genera, as commenced in the last Number of the *Register*, giving the characters of those which I have been able to examine myself, and inserting the names only of such as I am no otherwise acquainted with than by the descriptions of authors.

Tribus 2. SATUREINEÆ. (*Continued from fol.* 1282.)

§ 3. *Antheræ dimidiatæ vel cassæ.*

22. Westringia. *Smith.*—Calyx æqualis, 5-nervis, 5-dentatus. Corolla tubo calycem subæquante, bilabiata: labio superiori erecto subplano emarginato vel bifido, inferiori patente 3-fido. Stamina 4, distantia. Antheræ superiorum dimidiatæ, inferiorum 2-partitæ, cassæ. Stylus apice subæqualiter bifidus.

23. Microcorys. *Br. prodr. p.* 502.

Tribus 3. AJUGOIDEÆ.

Corollæ labium superius abbreviatum vel bifidum, demissum; inferius longius, patens. Stamina ascendentia, longè exserta.

24. Leucosceptrum. *Smith.* — Calyx ovato-campanulatus, subæqualis, 5-dentatus. Corolla tubo calyce breviori, bilabiata: labio superiori erecto emarginato, inferiori patente 3-fido. Stamina 4, ascendentia, ex emarginaturâ labii superioris longè exserta. Antheræ, loculis divaricatis confluentibus, subuniloculares. Stylus apice bifidus: lobo superiori breviore. Achenia reticulato-rugosa.

This genus, although referred by Sir J. E. Smith to the Verbenaceæ, and by Don (*Prodr. fl. nepal. p.* 103) to the genus Clerodendron, belongs undoubtedly to the order Labiatæ, and is indeed scarcely distinguishable from Teucrium. In habit it comes nearest to T. hyrcanicum. The structure of the flower is so nearly that of T. heterophyllum *Desf.*, that if the genus be retained, the latter species should probably be added to it.

25. Teucrium. *Linn.*—Calyx tubulosus, ovatus v. campanulatus, 5-fidus v. 5-dentatus, subæqualis v. bilabiatus. Corollæ tubus calyce subbrevior; labium superius bipartitum, laciniis demissis: inferius patens, 3-fidum. Stamina 4, ascendentia, è fissurâ labii superioris longè exserta. Antheræ, loculis divaricatis confluentibus, subuniloculares. Stylus apice subæqualiter bifidus. Achenia reticulato-rugosa.

This genus is easily subdivided into very natural sections, which, however, appear to me too closely connected to form separate genera.

26. Amethystea. *Linn.*—Calyx campanulatus, subæqualis, 5-fidus. Corollæ tubus calyce brevior, labium superius bipartitum: laciniis demissis, inferius patens, 3-fidum. Stamina fertilia 2, ascendentia, è fissurâ labii superioris longè exserta. Antheræ biloculares, loculis divergentibus, demùm divaricatis subconfluentibus. Stylus apice subæqualiter bifidus. Achenia reticulato-rugosa.

This genus only differs from Teucrium by the abortion of the two upper stamina. *A. cœrulea* is most nearly allied to *Teucrium orientale.*

27. Trichostema. *Linn.*—Calyx campanulatus, obliquè 5-fidus, resupinatus. Corolla, tubo calyce incluso, v. exserto incurvo, bilabiata: labio superiori integro falcato, v. bifido, lobis demissis: inferiori 3-fido, lobis lateralibus suberectis, medio patente. Stamina 4, ascendentia, è labio superiori longè exserta, falcata. Antheræ biloculares, loculis demùm divaricatis. Stylus apice subæqualiter bifidus. Achenia reticulato-rugosa.

This genus is allied to Amethystea and to Isanthus, which latter genus ought perhaps to be brought to this tribe; but my specimens are not good enough to enable me to ascertain precisely the direction of the stamina.

28. Ajuga. *Linn.*—Calyx ovatus, subæqualis, 5-fidus. Corolla tubo subexserto, bilabiata: labio superiori abbreviato erecto integro vel emarginato, inferiori majore patente trifido. Stamina 4, ascendentia, è labio superiori exserta. Antheræ 2-loculares, loculis divergentibus vel divaricatis subconfluentibus. Stylus apice subæqualiter bifidus. Achenia reticulato-rugosa.

29. Anisomeles. *Br.*—Calyx ovatus, subæqualis, 5-dentatus. Corolla tubo calycem subæquante, bilabiata, labio superiori abbreviato erecto integro, inferiori majore patente 3-fido. Stamina 4, ascendentia, è labio superiori exserta. Antheræ longiorum dimidiatæ, breviorum biloculares, loculis parallelis transversalibus. Stylus apice subæqualiter bifidus. Achenia lævia.

30? Collinsonia. *Linn.*—Calyx ovatus, bilabiatus, labio superiori 3-dentato, inferiori bifido. Corolla bilabiata, labio superiori abbreviato 4-dentato, inferiori elongato lacerato-fimbriato. Stamina fertilia 2, rariùs 4, ascendentia(?), exserta. Antheræ biloculares, loculis divaricatis. Stylus subæqualiter profundè bifidus. Achenia sicca, lævia, tribus sæpiùs abortivis.

Tribus 4. Monardeæ.

Corolla subæqualiter bilabiata. Stamina, 2 labii inferioris ascendentia, è labio superiori exserta vel ei subæqualia, antheris margine connexis; labii superioris abortiva v. rariùs fertilia, tubo subinclusa, antheris liberis.

31. Monarda. *Linn.*—Calyx cylindricus, 15-nervis, subæqualis, 5-dentatus, intùs fauce villosâ. Corolla tubo longè exserto, fauce subinflatâ, bilabiata, labiis subæqualibus; superiori erecto lineari integro, inferiori patente 3-fido. Stamina fertilia 2, ascendentia, è labio superiori exserta. Antheræ margine connexæ, biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

32. Blephilia. *Rafin.*—Calyx ovato-cylindricus, 10-nervis, intùs fauce nudâ, bilabiatus, labio superiori 3-dentatus dentibus subulato-aristatis, inferiori 2-dentatus dentibus breviter aristatis vel muticis. Corolla tubo exserto, fauce inflatâ, bilabiata, labiis subæqualibus: superiori erecto lineari integro, inferiori patente trifido. Stamina fertilia 2, ascendentia, è labio superiori exserta. Antheræ margine connexæ, biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

The *Monarda hirsuta* Pursh, belongs to this genus, as well as the *M. ciliata* Linn. or *Blephilia ciliata* Rafin.

33. Zizyphora. *Linn.*—Calyx elongato-cylindricus, 15-nervis, subæqualiter 5-dentatus, intùs fauce villosâ. Corolla tubo calycem subæquante, bilabiata, labiis subæqualibus: superiori erecto lineari integro, inferiori patente 3-fido. Stamina fertilia 2, ascendentia, è labio superiori exserta vel rariùs eo subbreviora. Antheræ margine connexæ, biloculares, loculis divaricatis. Styli lobus superior brevissimus. Achenia sicca, lævia.

Cunila capitata *Linn.* appears to me to have been correctly referred to this genus, although in *Z. capitata*, *hispanica*, and *tenuior* Linn. the stamina are somewhat shorter than the upper lip of the corolla; a circumstance, however, which, in this instance, I should consider of little importance.

34? Cunila. *Linn.*—Calyx tubulosus, 10-15-nervis, subæqualis, dentibus 5 margine villosissimis. Corolla tubo calycem subæquante, bilabiata, labiis subæqualibus: superiori erecto emarginato, inferiori patente 3-fido. Stamina fertilia 2, ascendentia, è labio superiori exserta. Antheræ margine connexæ (?), biloculares, loculis divaricatis. Stylus apice subinteger. Achenia sicca, lævia.

This genus thus restricted to C. *mariana* Linn., C. *paniculata* Benth., another N. American species unnamed in Linnæus's Herbarium, and C. *lythrifolia* Benth., a Mexican plant in Mr. Lindley's Herbarium, appears to me to belong to this tribe; although, on account of the manner in which the flowers are dried in the only specimen I have had an opportunity of dis-

secting, I have not been able to ascertain whether the anthers are constantly connected even in their young state. Under an ordinary microscope the style of C. *lythrifolia* appears entire, though by means of a powerful lens a slight fissure may be observed. In C. *mariana* the fissure is rather more apparent.

35. Rosmarinus. *Linn.* — Calyx campanulatus, bilabiatus, labio superiori integro, inferiori bifido, intùs fauce nudâ. Corolla tubo exserto, fauce subinflatâ, bilabiata, labiis subæqualibus: superiori erecto emarginato, inferiori patente 3-fido. Stamina fertilia 2, ascendentia, è labio superiori exserta. Antheræ margine connexæ, biloculares, loculis divaricatis. Styli lobus superior brevissimus. Achenia sicca, lævia.

36. Synandra. *Nutt. gen.* 2. *p.* 30.

Tribus 5. NEPETEÆ.

Corolla bilabiata. Stamina ascendentia, labio superiori breviora. Antheræ liberæ. Achenia sicca.

This tribe comprehends a large portion of the genera of Labiatæ, many of them apparently differing much from one another, but very difficult to reduce further into natural groups. The divisions I have here adopted, for the sake of convenience, are purely artificial.

§. 1. *Calyx æqualis vel obliquus*, 5-10-*dentatus, nec bilabiatus.*

* *Stamina è tubo exserta. Antheræ perfectæ.*

37. Leonotis. *Br.* — Calyx ovatus, 10-nervis, obliquè 8-10-dentatus, intùs fauce nudâ. Corolla tubo exserto, bilabiata: labio superiori erecto elongato fornicato, inferiori brevissimo reflexo patente 3-fido. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis subconfluentibus. Styli lobus superior brevissimus. Achenia sicca, lævia.

38. Leucas. *Br.*—Calyx ovatus v. cylindricus, 10-nervis, æqualis v. ore obliquus, 8-10-dentatus: fauce intùs nudâ v. villosâ. Corolla tubo calycem subæquante, bilabiata: labio superiori erecto ovato fornicato integro: inferiori patente 3-fido, lobo medio integro. Stamina 4, sub labio superiori ascendentia. Antheræ, loculis divaricatis confluentibus, subuniloculares. Styli lobus superior brevissimus. Achenia sicca, lævia.

Dr. Wallich's Indian collection contains 22 species of this genus, of which 17 are new.

39. Phlomis. *Br.* — Calyx tubulosus, 10-nervis, 5-gonus, æqualis, 5-dentatus, intùs fauce nudâ v. villosâ. Corolla tubo calycem subæquante, 2-labiata, labiis subæqualibus: superiori compresso galeato incumbente integro v. emarginato: inferiori patente 3-fido, lobis lateralibus minimis, medio integro. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis subconfluentibus. Styli lobus superior brevissimus. Achenia sicca, lævia.

Link (*Handbuch, p.* 479) has formed a separate genus, under the name of *Phlomidopsis*, of the P. *tuberosa* Linn., giving as the character "calyx dentibus rotundatis sub apice subulatis;" but this is more or less the case with most of the Phlomides, and is so irregular that it cannot form the distinctive mark of a genus. However, the P. *tuberosa* Linn., *herba venti* Linn., *macrophylla* Wall., and probably most of the herbaceous species, might form a separate section, characterised by the calyx naked inside, and by the upper stamina being produced below their point of insertion into a sort of spur. The P. *parviflora* Wall. cat. herb. ind. no. 2066, and *rugosa* Wall. l. c. no. 2067, appear to have fleshy achenia, and, if so, form a new genus of the order Prasieæ, allied to Gomphostemma *Wall.*; but the specimens are too imperfect to determine this point. The P. *alba* Forsk, and *moluccoides* Vahl, with neither of which I am acquainted, do not appear, from the descriptions given, to be true Phlomides.

40. Notochæte. *Benth.*—Calyx tubulosus, 5-nervis, 5-dentatus, intùs fauce nudâ, nervis sub apice dentium in setam hamatam productis. Corolla tubo calycem subæquante, bilabiata, labiis subæqualibus: superiori erecto fornicato integro: inferiori patente 3-fido, lobo medio integro. Stamina 4, sub labio superiori ascendentia. Filamenta superiorum basi sub insertione breviter calcarata. Antheræ biloculares, loculis demùm divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

Species unica, N. *hamosa*. Benth. in Wall. cat. herb. ind. no. 2068.

41. Ballota. *Linn.*—Calyx hypocrateriformis, æqualis, 10-nervis, plicatus, dentibus 5 subfoliaceo-dilatatis mucronatis, intùs fauce nudâ. Corolla tubo calyce subbreviore, bilabiata, labiis subæqualibus: superiori erecto integro fornicato: inferiori subpatente 3-fido, lobo medio bifido. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

42. Beringeria. *Necker.* — Calyx infundibuliformis, 10-nervis, æqualis, dentibus 10 foliaceo-dilatatis patulis mucronatis, intùs fauce villosâ. Corolla tubo calycem subæquante vel exserto, bilabiata, labiis subæqualibus: superiori erecto lineari fornicato integro vel dentato: inferiori patente trifido, lobo medio integro. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia vel minutissimè punctulata.

To this genus should be referred, besides the B. *cinerea*, *acetabulosa*, and *pseudodictamnus* of Link (*Handbuch, p.* 478), the *Marrubium africanum* Linn., *crispum* Linn., *hispanicum* Linn., *hirsutum* Willd., and probably also the M. *orientale* Spreng.

43. Roylea. *Wall.* — Calyx ovato-tubulosus, æqualis, 10-nervis, semi-5-fidus, laciniis oblongis venosis erectis, intùs fauce subvillosâ. Corolla calyce brevior, bilabiata, labiis subæqualibus: superiori erecto fornicato integro: inferiori patente 3-fido, lobo medio integro. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

Species unica, R. *elegans*. Wall. cat. herb. ind. no. 2069. (*Ballota cinerea.* Don prod. fl. nepal. 111?)

This genus is nearly allied in character to the two preceding, but differs much from both in habit. It was dedicated by Dr. Wallich to his friend Dr. Royle, superintendent of the Botanic Garden at Saharunpur.

44. Moluccella. *Linn.*—Bracteæ subulato-spinosæ. Calyx amplus, campanulatus, subæqualis, v. dente superiori majore obliquus, reticulato venosus, sub 5-8-dentatus. Corolla calyce brevior, bilabiata, labiis subæqualibus: superiori erecto fornicato integro: inferiori patente 3-fido, lobo medio bifido. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

45. Eriophyton. *Benth.*—Bracteæ foliaceæ. Calyx amplus, campanulatus, æqualis, dentibus 5 ovatis subspinosis. Corolla tubo calyce subbreviore, bilabiata: labio superiori amplo galeato compresso emarginato, inferius abbreviatum 3-fidum involvente. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

Species unica, E. *Wallichii.* Benth. in Wall. cat. herb. ind. no. 2070.

46. Chasmonia. *Presl.*—Bracteæ subulato-spinosæ. Calyx amplus, turbinatus, obliquè sub 5-dentatus: dente superiori maximo, inferioribusque obsoletis sinubusque 3 inferioribus spinosis. Corolla tubo calyce incluso, bilabiata: labio superiori erecto ovato-spathulato subplano emarginato: inferiori minore patente 3-fido, lobo medio bifido. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

47. Leonurus. *Linn.*—Calyx ovatus v. campanulatus, 5-10-nervis, æqualis, dentibus 5 subulatis, intùs fauce nudâ. Corolla tubo subexserto, bilabiata, labiis subæqualibus: superiori erecto integro subplano v. fornicato, inferiori patente 3-fido: lobo medio integro v. bifido. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis parallelis. Stylus apice subæqualiter bifidus. Achenia sicca.

The *Panzeria* Mœnch, which I should, with Persoon, consider as a section of this genus, differs from the true Leonuri by the fornicate upper lip of the corolla, and by the emarginate or 2-cleft middle division of the lower lip; but as the habit of all the species is so much alike, I do not think these differences sufficient to constitute a separate genus.

48. Galeobdolon. *Huds.*—Calyx campanulatus, 5-nervis, subæqualis, 5-dentatus, intùs fauce nudâ. Corolla tubo calycem subæquante, bilabiata: labio superiori erecto incurvo subfornicato integro: inferiori minore patente trifido, lobis lateralibus reflexis, medio integro. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis demùm divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

49. Galeopsis. *Linn.*—Calyx campanulatus, sub 10-nervis, æqualis, 5-dentatus, aristatus, intùs fauce nudâ. Corolla tubo exserto, fauce inflatâ bidentatâ, bilabiata, labiis subæqualibus: superiori erecto integro v. crenulato fornicato, inferiori patente 3-fido. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis subparallelis, valvulis intùs ciliatis v. nudis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

In the section *Tetrahitum*, which Presl considers as a distinct genus, the valves of the anthers are not ciliate; but I can perceive no other difference.

50. Lamium. *Linn.*—Calyx campanulatus, subæqualis, 10-nervis, 5-dentatus, aristatus, intùs fauce nudâ. Corolla tubo exserto, fauce inflatâ, bilabiata, labiis subæqualibus: superiori erecto integro fornicato: inferiori patente 3-fido, lobis lateralibus suberectis antice dentatis, medio emarginato. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis, margine extùs barbatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

51. Orvala. *Linn.*—Calyx campanulatus, subæqualis, sub 5-nervis, 5-dentatus, aristatus, intùs fauce nudâ. Corolla tubo exserto, fauce inflatâ dentatâ, bilabiata, labio superiori erecto fornicato dentato: inferiori patente 3-fido, lobis lateralibus reflexis, medio emarginato. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divergentibus, demùm divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

52. Physostegia. *Benth.*—Calyx ovatus, post anthesin inflatus, sub 10-nervis, breviter 5-dentatus, intùs fauce nudâ. Corolla tubo exserto, fauce inflatâ edentulâ, bilabiata, labiis subæqualibus: superiori erecto integro v. emarginato subfornicato: inferiori patente 3-fido, lobo medio integro. Stamina 4, sub labio superiori ascendentia. Antheræ 2-loculares, loculis parallelis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

This genus includes *Dracocephalum virginianum* Linn., D. *variegatum* Vent., D. *denticulatum* Ait., and probably also D. *cordatum* Nutt.

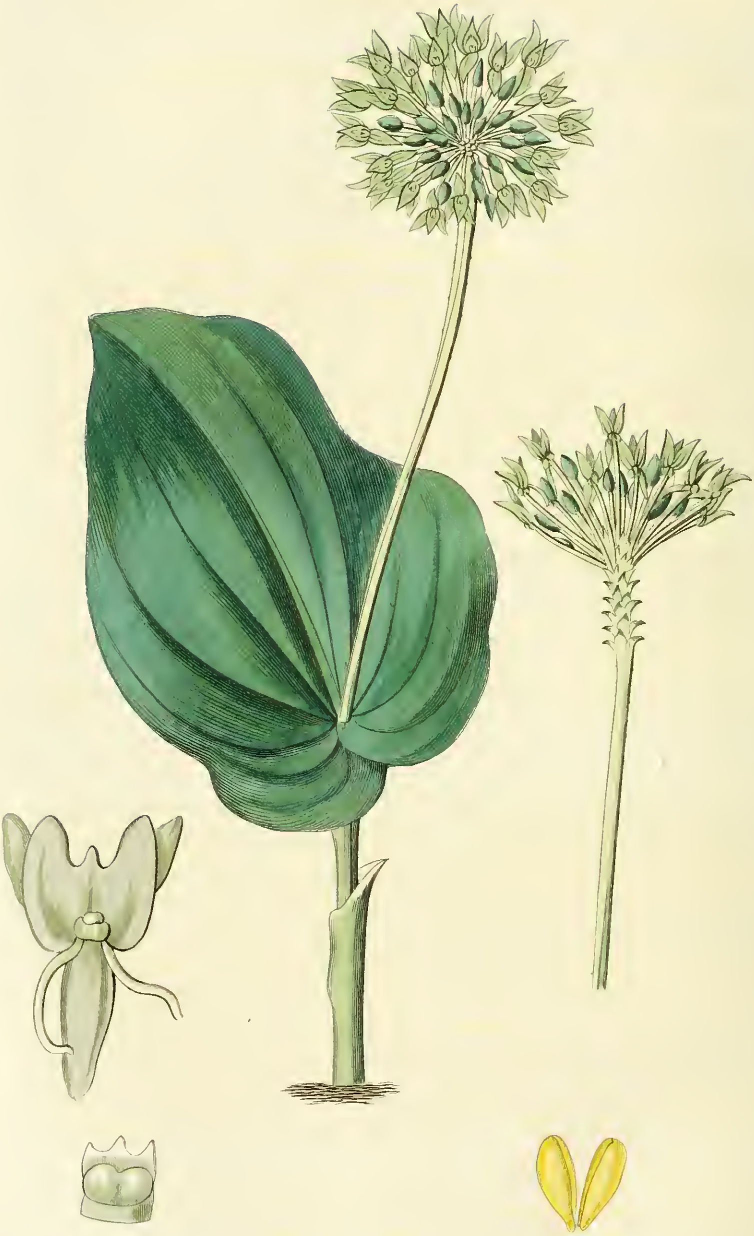
53. Sphacele. *Benth.*—Calyx campanulatus, subæqualis, 13-15-nervis, venosus, 5-dentatus, intùs fauce nudâ. Corolla tubo exserto, fauce subinflatâ, bilabiata, labiis subæqualibus: superiori erecto bifido subplano: inferiori patente 3-fido, lobis lateralibus reflexis, medio bifido, laciniis reflexis. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis linearibus divergentibus. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

Species omnes Chilenses facie Salviæ. 1. S. *Lindlei* Benth. (Stachys salviæ, *Lindley bot. reg.* t. 1226. folia basi hastato-sagittata). 2. S. *subhastata* Benth. (folia basi subhastata vel truncata). 3. S. *campanulata* Benth. (folia parva basi attenuata).

54. Betonica. *Linn.*—Calyx ovatus, 10-nervis, æqualis, 5-dentatus, aristatus, intùs fauce nudâ. Corolla tubo sæpiùs exserto, bilabiata, labiis subæqualibus: superiori subpatente subplano integro v. emarginato: inferiori patente 3-fido, lobo medio integro. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis parallelis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

55. Stachys. *Linn.* suprà.

(*To be continued.*)



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1290

MICROSTÝLIS* ophioglossoídes; *β. mexicana.*

Mexican Snake's-tongue-leaved Microstylis.

◆

GYNANDRIA *MONANDRIA.*

Nat. ord. Orchideæ. § Malaxideæ *Lindley:* * Pleurothalleæ.

MICROSTYLIS Nutt.—*Sepala* patentia, libera; lateralia basi æqualia sæpiùs breviora. *Petala* patentia, linearia v. filiformia. *Labellum* patentissimum, cum columnâ angulum rectum formans, basi excavatum, sagittatum v. auriculatum, integerrimum v. dentatum, tuberculis nullis. *Columna* minima, raró paululùm elongata, apice dentibus seu auribus duâbus instructa. *Pollinia* 4, collateralia.——Herbæ *terrestres v. epiphytæ, habitu* Liparis, foliis *plicatis v. membranaceis, basi raró incrassatis.* Flores *herbacei, nunc flavescentes v. discolores.*—Lindley, Genera and Species of Orchideous Plants, part 1. ined.

M. *ophioglossoides;* caule unifolio, racemo obtuso capitato multifloro, labello tridentato. *l. c.*

Malaxis unifolia. *Michaux.*

Malaxis ophioglossoides. *Willd. no.* 3. *Lodd. bot. cab. t.* 1146. excellent.

Microstylis ophioglossoides. *Nutt. gen.* 2. 196.

β. mexicana; caule pedali, racemo densiore, labelli dente mediâ lateralibus minore. *l. c.*

This genus was instituted by Mr. Nuttall, but with a very erroneous description. It is, however, most distinctly characterised, and has been since proposed by Dr. Blume under the name of Crepidium; and by Dr. Wallich, in his manuscript papers, under that of Thyreochilus. Fourteen species are known to us, of which five are unpublished. Malaxis monophyllos *Willd.*, diphyllos of *Chamisso*, umbellulata and spicata of *Swartz*, acuminata of *Don*, Rheedii *Willd.*, Crepidium flavescens *Blume*, and Ophrys macrostachya *Llave*, all belong to the genus. We shall give the characters of these and other species in a work specially devoted to the subject, which will appear in the spring of the following year, with illustrations drawn from the admirable sketches of Mr. Bauer.

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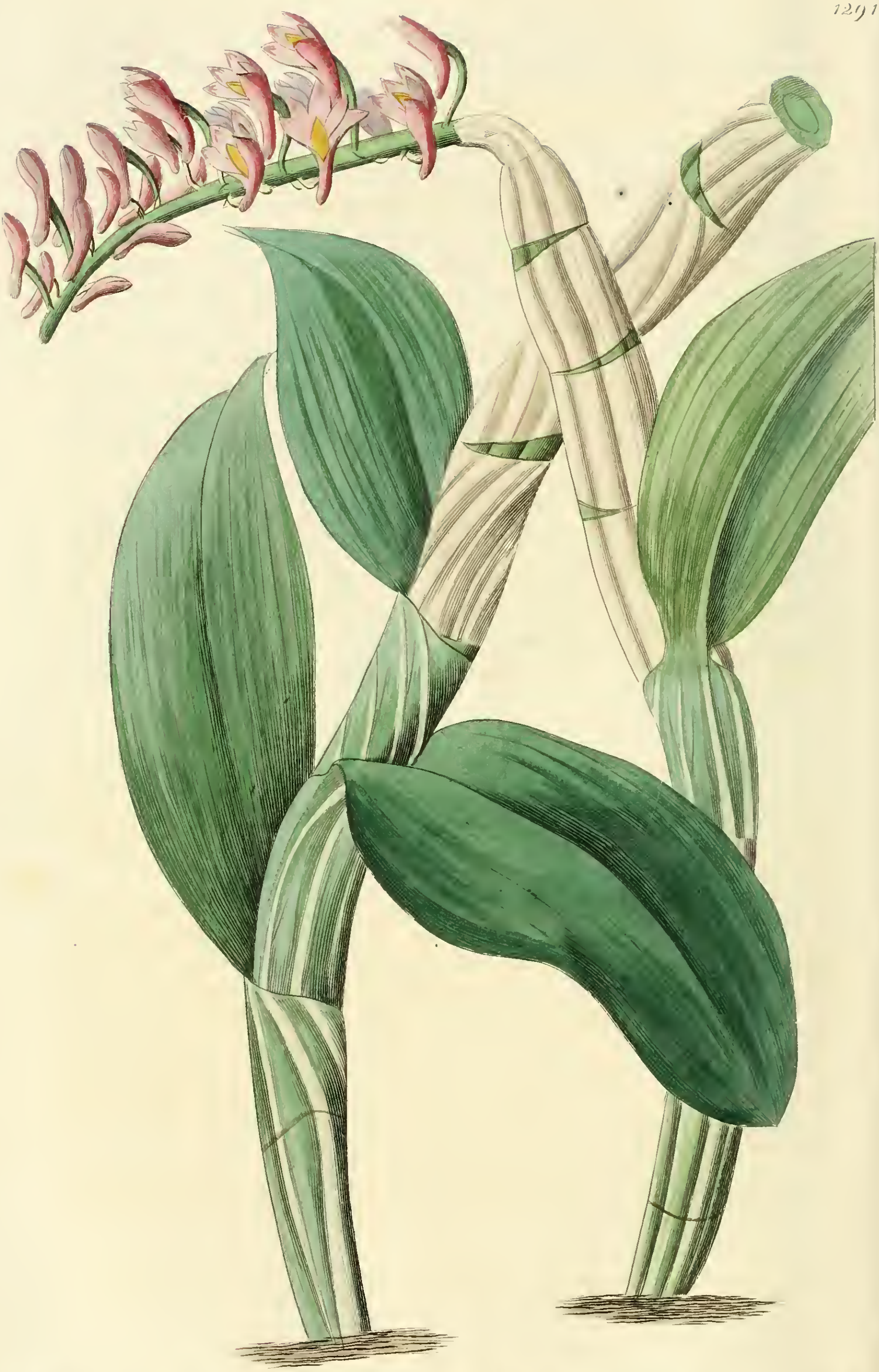
* So named from μικρὸς, small, and στύλος, a column; in allusion to the very small size of what is called the column in this plant.

The subject of the accompanying plate was raised in the Garden of the Horticultural Society, from roots transmitted from Mexico by Mr. John Brown. It grows in the greenhouse, in a pot, coming up every year in the spring, flowering for five or six weeks, and then dying down. The inflorescence is remarkable, when it first appears, for its very depressed state. The axis afterwards elongates; and what was at first an umbel, becomes a corymbose raceme. In the figure this is pretty well shewn; but the leaf is represented too cordate, and the form of the labellum is, as may be seen from the magnified figure, inaccurate.

It is impossible to distinguish this from the M. ophioglossoides of North America, which is well figured in Mr. Loddiges' *Botanical Cabinet*. It differs in its greater stature, it is true, and also in the proportion borne by the middle lobe of the labellum to the side ones; but we doubt whether the species of Orchideous plants are to be characterised by marks so slight as these.

J. L.



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DENDRÓBIUM* secúndum.

One-sided Dendrobium.

GYNANDRIA *MONANDRIA.*

Nat. ord. ORCHIDEÆ. § Malaxideæ *Lindl.* * Dendrobieæ.
DENDROBIUM. — *Suprà, vol.* 7. *fol.* 548.

§ *Caules undique foliosi, cylindracei, sæpè penduli.*

D. *secundum;* caulibus pendulis, foliis oblongis apice obliquè retusis, racemis lateralibus terminalibusque secundis, sepalis ovatis: lateralibus basi in cornu longo obtuso incurvo connatis, petalis supremo paulò minoribus, labello integerrimo acuto apice tumido.—*Lindley, Genera and Species of Orchideous Plants, part* 1. ined.

D. secundum. *Wall. in cat. herb. ind.*

Pedilonum secundum. *Blume Bijdrag. p.* 322.

For an opportunity of presenting the public with a figure of this fine species, we have to thank Mr. Tate, of the Sloane Street Nursery, by whom a plant in flower was communicated in July last. It had been collected at Rajah Bassa, in Sumatra, by William M'Killigin, Esq.

It appears, from Dr. Wallich's drawings, to be a most lovely species in its native places of growth, forming long pendent stems, which throw out an abundance of one-sided racemes of purple flowers 5 or 6 inches long. The specimen now represented blossomed imperfectly, as its stems had been allowed to remain in an erect, instead of pendent position. The habit of this, and many other Dendrobriums, being to hang down from the trees on which they grow, it is impossible to cultivate them with any success unless they are suspended in the air in pots, or otherwise so managed that they can shoot freely in the way that is natural to them.

If we are right in Dr. Blume's synonym, which we can scarcely doubt, this species is a native of mountainous places in Java. Dr. Wallich found it in one of the Islands in the Straits of Malacca, and also in the province of Martaban, as appears from that part of the *Catalogue of Dried Plants* distributed under the orders of the Honourable Court of Directors of the East India Company, which has just appeared. This catalogue already comprehends upwards of 2000 species, of the greater part of which specimens have been, or will be, presented to scientific institutions and persons in every part of the civilised world. Large as is the number already enumerated, it is to be considered as a mere fragment of what the catalogue will eventually contain, so stupendous are the stores from which the collection is derived, and so unreserved is the liberality of the generous and enlightened donors. We trust that this splendid example will be followed by other bodies in whose possession are similar extensive collections, whether Botanical or belonging to any department of Natural History whatsoever. To keep the duplicates, triplicates, and multiplicates of collections which have often cost the public large sums of money, and which have always been formed at great personal risk and trouble,—we say, to keep such collections locked up in chests, deposited in cellars, or tied up in bundles, in public museums, where they can only become the food of insects, or the victims of dust and time, is cruel towards those by whom they were procured, unjust towards the community, unworthy of men of liberal minds, and most injurious to the best interests of science. It is highly to the honour of Great Britain that this system of distributing the duplicates of public collections should have originated with her; and we are sure that, whether this example is followed by the British and other Governments, as we trust that it speedily will be, or not, the name of the English East India Company will stand in the records of science as far above that of all other associations of individuals, as it already does in the annals of commerce, and in the history of political affairs.

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* So called from δένδρον, a tree, and βιόω, to live; the species all growing upon trees.

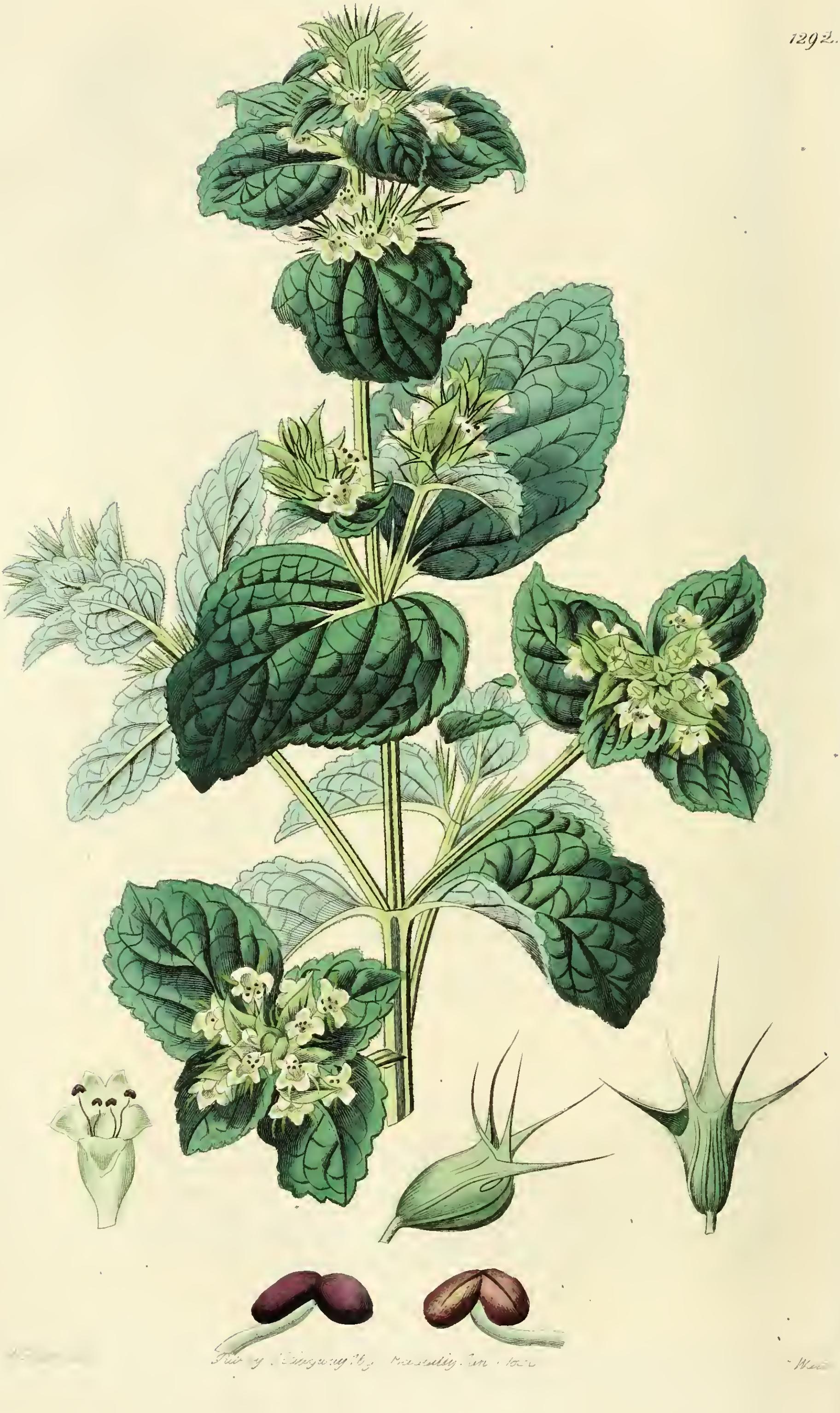
Dr. Blume's genus Pedilonum is characterised by the cohesion of its lateral sepals into a spur; but as this character is not in any degree connected with habit, and can frequently not be determined with accuracy, in consequence of the numerous and insensible gradations of union between the sepals, and is, moreover, unaccompanied by any kind of secondary character, we are obliged to reject it.

J. L.

NOTE.

In the last Number of the *Botanical Magazine* a fine Orchideous plant was published, under the name of *Stanhopea insignis*. As this is likely to attract attention, and will probably be soon a common plant in collections, we take the earliest opportunity of giving notice, that the name assigned to it in the *Botanical Magazine* cannot be retained, as it is a species of Ceratochilus, a genus long since published in Mr. Loddiges' *Botanical Cabinet*.

1292.



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LEPECHÍNIA* spicáta.

Spiked Lepechinia.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. LABIATÆ. § *Nepteæ.* Bentham.

LEPECHINIA Willd.—*Calyx* campanulatus, 13-nervis, bilabiatus, labio superiori 3-dentato aristato, inferiori truncato biaristato, post anthesin inflexo calycem claudente: fauce intùs nudâ. *Corolla* tubo calyce breviori, bilabiata: labio superiori erecto emarginato subplano: inferiori patente 3-fido, lobo medio integerrimo. *Stamina* 4, sub labio superiori ascendentia, lateraliter divergentia. *Antheræ* biloculares, loculis divergentibus demùm divaricatis. *Stylus* apice subæqualiter bifidus. *Achenia* sicca, lævia.—*Bentham.*

L. spicata. *Willd. hort. berol.* 1. *p.* 21. *t.* 21. *enum.* 2. 612. *Kunth synopsis*, 2. 87.
Horminum caulescens. *Orteg. dec. p.* 63. *Pers. synops.* 2. 132.

We have frequently seen this plant raised from collections of Mexican seeds, wherefore we suppose it to be a common weed in that country. With us it is a hardy annual or biennial, growing a foot or two high, flowering from June to October, and readily increased by seeds.

Our principal motive for publishing it now is for the purpose of giving a figure something better than the very bad one of Willdenow, which is commonly quoted, and Mr. Bentham's amended character of the genus.

We also profit by the present opportunity to continue that gentleman's characters of Labiatæ, comprising all the genera, except those of *Ocymoideæ*, which will appear hereafter.

J. L.

(*Continued from fol.* 1289.)

"56. Chaiturus. *Mœnch.*—Calyx ovatus, 5-10-nervis, æqualis, 5-dentatus, aristatus, intùs fauce nudâ. Corolla tubo calycem subæquante, bilabiata, labiis subæqualibus: superiori erecto integro fornicato: inferiori patente trifido, lobo medio integro. Stamina 4, sub labio superiori ascendentia, è tubo vix exserta. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

57. Cymaria. *Benth.*—Calyx subglobosus, sub 10-nervis, æqualis, 5-dentatus, fauce coarctatâ intùs nudâ. Corolla tubo subexserto, bilabiata, labiis subæqualibus: superiori erecto integro fornicato: inferiori patente 3-fido, lobo medio integro. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Styli lobus superior brevissimus. Achenia sicca, punctato-rugosa.

Species 2 Indicæ. 1. C. *elongata* Benth. in Wall. cat. herb. ind. no. 2079. 2. C. *dichotoma* Benth. in l. c. no. 2080. Habitus Craniotomis.

58. Craniotome. *Reichenb.*—Calyx ovatus, post anthesin subglobosus, sub 10-nervis, æqualis, 5-dentatus, fauce coarctatâ intùs villosâ. Corolla tubo exserto, bilabiata, labio superiori brevissimo erecto integro, inferiori longiore patente 3-fido. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis demùm divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

This genus appears to me to have no affinity to Anisomeles, with which Sprengel has joined it.

59. Nepeta. *Linn.* — Calyx tubulosus, basi subgibbus, 15-nervis, æqualis, v. ore obliquus, 5-dentatus, intùs fauce nudâ. Corolla tubo subexserto, fauce inflatâ, bilabiata, labiis subæqualibus: superiori erecto emarginato fornicato v. subplano: inferiori patente 3-fido, lobis lateralibus reflexis, medio lato concavo. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, minutè rugoso-punctata, rariùs lævia.

60. Glechoma. *Linn.*—Calyx tubulosus, 15-nervis, æqualis, 5-dentatus, intùs fauce nudâ. Corolla tubo exserto, fauce inflatâ, bilabiata, labiis subæqualibus: superiori erecto subplano

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* Named after Lepechin, a Russian Botanist and traveller.

emarginato: inferiori patente 3-fido, lobo medio integro plano. Stamina 4, sub labio superiori ascendentia, breviora vix è tubo exserta. Antheræ biloculares, loculis ante anthesin parallelis, demùm divergentibus v. divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

This genus is scarcely distinguishable from Nepeta.

61. Colquhounia. *Wall.* — Calyx campanulatus, 10-nervis, subæqualis, 5-dentatus, intùs fauce nudâ. Corolla tubo exserto incurvo, fauce inflatâ, bilabiata, labiis subæqualibus: superiori erecto integro subfornicato: inferiori patente 3-fido, lobo medio integro. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, supernè alata.

Dr. Wallich's collection contains, besides C. *coccinea*, two new species; C. *elegans* Wall. cat. no. 2084, and C. *vestita* Wall. cat. no. 2086.

62. Achyrospermum. *Blume Bijdragen, p.* 840. A genus apparently allied to Colquhounia.

63? Holmskioldia. *Retz.* — Calyx amplus, campanulatus, membranaceus, venosus, margine subintegerrimo. Corolla tubo exserto, fauce vix inflatâ, bilabiata, labio superiori abbreviato erecto integro: inferiori subpatente trifido, lobis lateralibus brevissimis, medio longiori integro. Stamina ascendentia, exserta. Antheræ biloculares, loculis parallelis. Stylus apice subinteger. Achenia sicca? rugosa.

** *Stamina è tubo exserta. Antheræ dimidiatæ vel cassæ.*

64? Hemigenia. *Br. prodr. p.* 502.

*** *Stamina intra tubum inclusa.*

65. Sideritis. *Linn.* — Calyx ovatus, campanulatus, 10-nervis, æqualis, vel dente superiore majore obliquus, 5-dentatus, spinosus, intùs fauce villosâ. Corolla tubo calycem subæquante, bilabiata: labio superiori erecto bifido subplano: inferiori patente trifido, lobo medio emarginato. Stamina 4, ascendentia, intra tubum inclusa. Antheræ biloculares, loculis divaricatis, staminum inferiorum sæpiùs cassæ v. abortivæ. Stylus apice breviter bifidus, lobo inferiori membranaceo superiorem clavatum basi involvente. Achenia sicca.

66. Marrubium. *Linn.*—Calyx ovatus, 10-nervis, striatus, subæqualis, dentibus 5 v. 10 rigidis patulis: intùs fauce villosâ. Corolla tubo subexserto, bilabiata: labio superiori erecto lineari bifido subplano: inferiori patente trifido, lobo medio crenulato. Stamina 4, ascendentia, intra tubum corollæ inclusa. Antheræ biloculares, loculis divaricatis sæpiùs confluentibus. Stylus apice breviter bifidus, lobis conicis, superiori breviore. Achenia sicca.

The above characters will probably include all the species of Marrubium which remain after the exclusion of those I have referred to Beringeria, and of the M. mollissimum *Don*, which appears to be a Leucas.

67. Lavandula. *Linn.* — Calyx ovatus, 13-nervis, subæqualis, 5-dentatus, dentibus 4 subæqualibus, quinto summo apice appendiculatim producto. Corolla tubo exserto, bilabiata; labio superiori erecto emarginato v. bifido: inferiori patente trifido. Stamina 4, ascendentia, intra tubum corollæ inclusa. Antheræ biloculares, loculis divaricatis subconfluentibus. Stylus apice subinteger, stigmatibus complanatis connatis. Achenia sicca.

68? Phytoxys. *Molin.* ex Spreng. syst. no. 2081.

69? Rizoa. *Cav.* ic. 6. p. 56. t. 578.

§ 2. *Calyx bilabiatus. Antheræ biloculares vel connectivo brevi dimidiatæ.*

70. Dracocephalum. *Linn.*—Calyx tubulosus, 15-nervis, bilabiatus: labio superiori 3-dentato, dentibus ovatis, mediâ sæpiùs latiore: inferiori 2-dentato, dentibus linearibus: intùs fauce nudâ. Corolla tubo nunc exserto nunc calyce breviori, fauce inflatâ, bilabiata: labio superiori erecto, emarginato, fornicato: inferiori patente trifido, lobo medio emarginato subplano. Stamina 4, sub labio superiori ascendentia, approximata. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

71. Melissa. *Linn.* — Calyx 5 v. sub 13-nervis, campanulatus, bilabiatus, labiis patentibus, superiori subplano 3-dentato vel 3-mucronato, inferiori bifido: fauce intùs nudâ v. vix pilosâ. Corolla tubo nunc calycem subæquante nunc exserto, fauce subinflatâ, bilabiata: labio superiori erecto emarginato subplano v. rariùs fornicato: inferiori patente trifido, lobo medio subplano. Stamina 4, sub labio superiori ascendentia, superiora nunc sterilia v. abortiva. Antheræ biloculares, loculis demùm divaricatis.

This genus would thus comprehend M. *officinalis* Linn., *pyrenaica* Jacq., *parviflora* Benth. in Wall. cat. no. 2825, and *flava* Wall. cat. no. 2826. I have also referred to it the *Cunila nepalensis* Don prod. fl. nepal. p. 107, which differs from the other species of Melissa by the constant abortion of the upper stamina, and by the rugose nuts; but as I have observed the upper stamina to be occasionally sterile in several species of this and other genera of this section, I can scarcely consider the remaining character, of the rugosity of the nuts, sufficient to warrant the constituting a separate genus.

72. Lepechinia. *Willd.*—Suprà.

73. Thymbra. *Linn.* — Calyx 5-nervis, ovatus, suprà planus angulis ciliatis, basi infrà gibbus, bilabiatus, labio superiori 3-dentato, inferiori bifido: intùs fauce villosâ. Corolla tubo exserto, bilabiata: labio superiori erecto emarginato v. bifido: inferiori patente trifido, lobo medio emarginato. Stamina 4, sub labio superiori ascendentia, approximata. Antheræ biloculares, connectivo crasso, loculis distinctis parallelis. Stylus apice subæqualiter bifidus. Achenia sicca, lævia.

74. Acynos. *Mœnch.*—Verticillastra pauciflora. Calyx 13-nervis, tubulosus, basi infrà gibbus,

bilabiatus, labio superiori 3-dentato, inferiori bifido: intùs fauce villosâ. Corolla tubo nunc exserto subinflato, nunc calyce incluso, bilabiata: labio superiori erecto integro v. brevissimè emarginato, subplano: inferiori patente 3-fido, lobo medio subintegerrimo. Stamina sub labio superiori ascendentia, approximata, superiora nunc sterilia v. abortiva. Antheræ biloculares, loculis distinctis, connectivo crasso sæpiùs adnatis, subparallelis divergentibus v. demùm divaricatis. Styli lobus inferior recurvus, complanatus, superiorum brevissimum basi involvens. Achenia sicca, lævia.

This character includes *Hedeoma* Pers.

75. Gardoquia. *Ruiz* et *Pav.*—Flores in axillis subsolitarii v. laxè cymosi. Calyx 13-nervis, tubulosus, basi æqualis, bilabiatus, labio superiori 3-dentato, inferiori bifido, v. rariùs subæqualis: intùs fauce villosâ v. subnudâ. Corolla tubo exserto sæpiùs incurvo, fauce vix inflatâ, bilabiata: labio superiori erecto emarginato subplano: inferiori patente 3-fido, lobo medio emarginato. Stamina sub labio superiori ascendentia, lateraliter divergentia, superiora nunc sterilia. Antheræ biloculares, loculis divergentibus v. demùm divaricatis. Styli lobus inferior recurvus, complanatus, superiorem breviorem, nunc brevissimum, basi involvens. Achenia sicca.

These characters are taken from Ruiz and Pavon's specimens in Mr. Lambert's Herbarium. The Horticultural Society's collections contain a Chilian plant which bears considerable resemblance to the other Gardoquias, but appears to have the style regularly bifid. The specimens are not, however, good enough to enable me to determine exactly its affinities.

76. Calamintha. *Mœnch.*—Flores in axillis subsolitarii v. sæpiùs laxè cymosi. Calyx 13-nervis, tubulosus, basi subæqualis, bilabiatus, labio superiori tridentato, inferiori bifido, v. rariùs subæqualis: intùs fauce villosâ v. rariùs subnudâ. Corolla tubo sæpiùs exserto subrecto, fauce subinflatâ, bilabiata: labio superiori erecto emarginato subplano: inferiori patente trifido, lobo medio emarginato. Stamina sub labio superiori ascendentia, approximata, superiora nunc sterilia. Antheræ biloculares, loculis distinctis, connectivo crasso sæpiùs adnatis, subparallelis divergentibus vel demùm divaricatis. Styli lobus inferior recurvus, complanatus, superiorem breviorem, nunc brevissimum, basi involvens. Achenia sicca, lævia.

77. Clinopodium. *Linn.*—Verticillastra confertè multiflora. Calyx 13-nervis, tubulosus, basi subæqualis, sæpiùs incurvus, bilabiatus, labio superiori tridentato, inferiori bifido: intùs fauce subnudâ. Corolla tubo sæpiùs exserto, bilabiata: labio superiori erecto emarginato subplano: inferiori patente trifido, lobo medio emarginato. Stamina sub labio superiori ascendentia, superiora nunc sterilia. Antheræ biloculares, loculis distinctis, connectivo crasso sæpè adnatis, subparallelis divergentibus v. demùm divaricatis. Styli lobus inferior recurvus, complanatus, superiorem breviorem, nunc brevissimum, basi involvens. Achenia sicca, lævia.

These four last genera are separated only by distinctions so vague and so slight, that they ought perhaps to form but one, which would be well characterised by the 13-nerved tubular calyx (it being constantly 15-nerved in Nepeta and Dracocephalum, and ovate or campanulate in Melissa, Lepechinia, and Thymbra), and especially by the conformation of the style, which is nearly the same as in Sideritis.

78. Melittis. *Linn.* — Calyx irregulariter venosus, campanulatus, subfoliaceus, bilabiatus: labio superiori lato emarginato vel bilobo: inferiori bilobo, lobis lato ovatis. Corolla tubo longè exserto, bilabiata, labio superiori integro, inferiori 3-fido, lobis omnibus rotundatis patentibus subæqualibus. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divergentibus. Stylus apice breviter bifidus, lobis subæqualibus. Achenia sicca, lævia.

79. Macbridea. *Elliott* in Nutt. gen. 2. p. 36.

80. Prunella. *Linn.* — Calyx ovatus, bilabiatus, labio superiori subplano 3-dentato vel 3-mucronato, inferiori bifido: intùs fauce nudâ. Corolla tubo exserto, bilabiata, labio superiori erecto integro fornicato, inferiori patente trifido. Stamina 4, sub labio superiori ascendentia. Filamenta apice bidentata, dente superiori nudâ, inferiori antheriferâ. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus. Achenia sicca.

81. Cleonia. *Linn.* — Calyx ovatus, 10-nervis, bilabiatus, labio superiori 3-dentato, inferiori bifido: intùs fauce villosâ. Corolla tubo longè exserto, bilabiata, labio superiori erecto emarginato fornicato, inferiori patente 3-fido. Stamina 4, sub labio superiori ascendentia. Filamenta apice bidentata, dente superiori nudâ, inferiori antheriferâ. Antheræ biloculares, loculis divergentibus. Stylus apice subæqualiter quadrifidus. Achenia sicca, lævia.

The structure of the style in this genus seems to shew that that of the Labiatæ in general should be considered as consisting of the union of four distinct styles, and each lobe of the ovarium as one of four distinct ovaria connected together. In some specimens of Prunella I have observed a third, and even a fourth, tube in the style, reaching part of the way up the divisions of the apex, and there terminating in a very small stigma.

82. Scutellaria. *Linn.*—Calyx ovato-campanulatus, supra in squamam concavam, dorsalem, appendiciformem productus: ore bilabiatus, labiis integris, post anthesin clausis. Corolla tubo longè exserto, bilabiata, labio superiori erecto fornicato incumbente, inferiori breviore suberecto 3-fido. Stamina 4, sub labio superiori ascendentia. Antheræ ciliatæ, staminum superiorum dimidiatæ, inferiorum cordatæ, biloculares, loculis divaricatis. Styli lobus superior brevissimus. Ovarium gynophoro incurvo elevatum. Achenia sicca, lævia, nuda.

83. Perilomia. *Kunth* nov. gen. et spec. 2. p. 326.

84? Hemiandra. *Br.* prod. p. 502.

§ 3. *Calyx bilabiatus. Antheræ dimidiatæ, connectivo elongato filiformi.*

Salvia. *Linn.* — Calyx bilabiatus, labio superiori integro v. 3-dentato, inferiori bifido. Corolla bilabiata, labio superiori erecto fornicato v. falcato, inferiori patente trifido. Stamina fertilia 2, sub labio superiori ascendentia. Filamenta brevissima, tubo inclusa. Antheræ dimidiatæ; connectivo elongato, filiformi, incurvo, postice sæpiùs clavato, rariùs antheræ loculam alteram gerente. Stylus apice bifidus, lobo superiori sæpiùs breviore. Achenia sicca.

The *Stenarrhena lanata* Don prodr. fl. nepal. p. 111, appears to me to be a species of Salvia (S. *cana* Wall. cat. no. 2145).

Tribus 6. Prasieæ.

Corolla bilabiata. Stamina ascendentia. Achenia carnosa.

86. Prasium. *Linn.* — Calyx campanulatus, 10-nervis, bilabiatus, labio superiori 3-fido, inferiori bifido, lobis ovatis foliaceis. Corolla tubo calyce breviori, bilabiata, labiis subæqualibus: superiori erecto integro subplano: inferiori patente 3-fido, lobo medio integro. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus, lobis subulatis. Achenia carnosa.

This genus would thus be again confined to the European species.

87. Phyllostegia. *Benth.* — Calyx ovatus, 10-nervis, subæqualis, nunc 5-fidus, lobis ovatis foliaceis, nunc breviter 5-dentatus. Corolla tubo calycem superante, nunc longè exserto, sæpiùs incurvo, fauce non inflatâ, bilabiata: labio superiori subpatente integro subplano: inferiori longiore patente 3-fido, lobis ovatis, medio majore integro. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divergentibus v. demùm divaricatis. Stylus apice clavatus, breviter bifidus, lobis clavato divaricatis v. lunatis. Achenia carnosa. Verticillastra racemosa v. paniculata, foliis floralibus bracteæformibus.

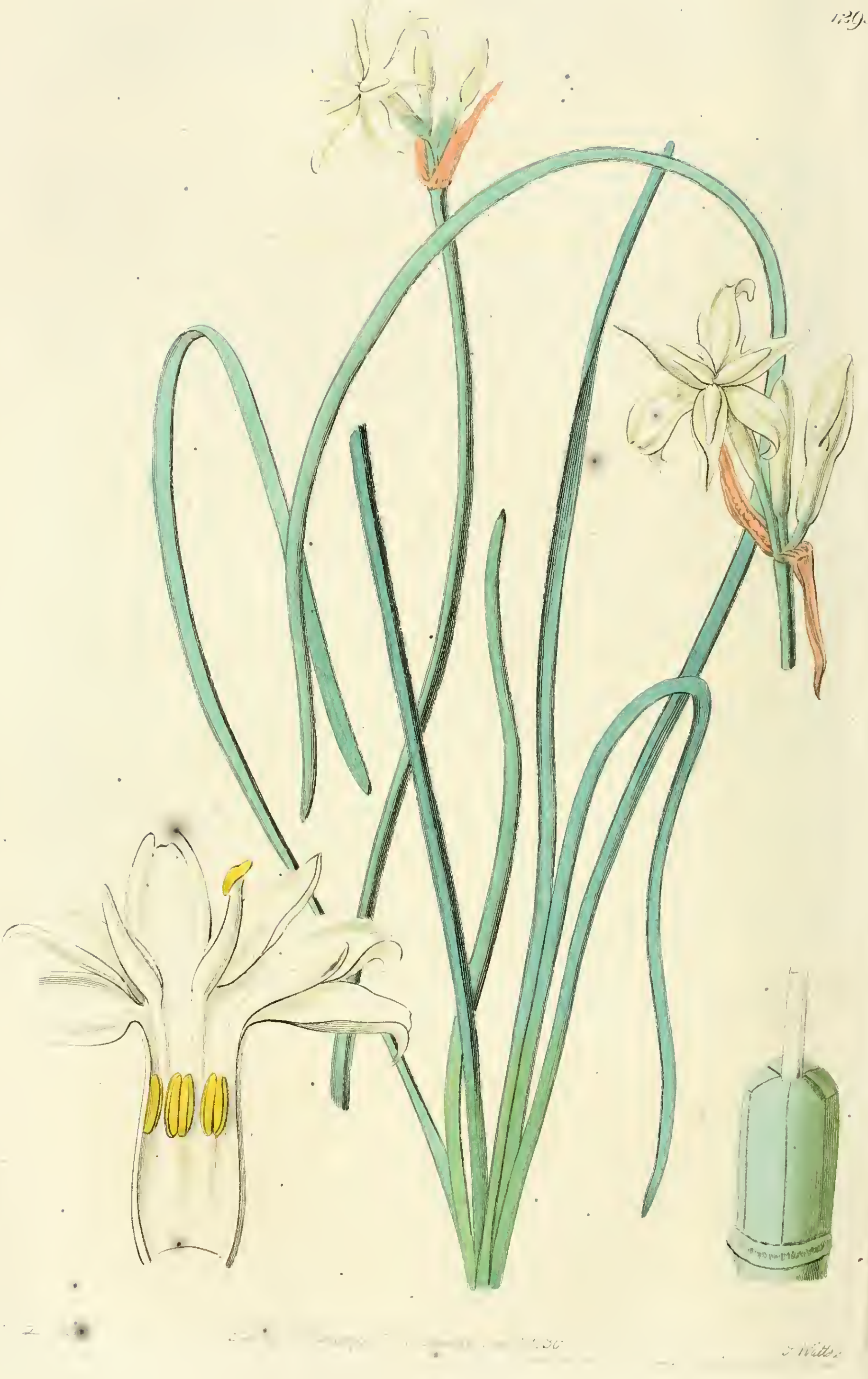
The Herbarium of the Horticultural Society contains nine species of this genus, all gathered by their collector, Mr. M'Rae, in the Sandwich Islands. The following are some of the most striking characters by which they may be distinguished. 1. P. *dentata*, hirsutissima, calycis lobis foliaceis dentatis, styli lobis clavatis. 2. P. *vestita*, hirsutissima, calycis lobis foliaceis integerrimis, styli lobis clavatis. 3. P. *grandiflora* (Prasium grandiflorum. *Gaudichaud*, atlas du voy. de Freyc, t. 65 ?) glabriuscula, calycis lobis subfoliaceis, styli lobis lunatis. 4. P. *macrophyllum* (Prasium macrophyllum *Gaudich.* l. c. ?), caule foliisque glabriusculis, calycibus breviter 5-dentatis, styli lobis lunatis, racemis abbreviatis. 5. P. *leptostachys*, caule foliisque adpressè villosis, calycibus breviter 5-dentatis, styli lobis lunatis, racemis elongatis, verticillastris distantibus. 6. P. *glabrum* (Prasium glabrum *Gaudich.* l. c. t. 64), pedunculis solitariis axillaribus, trifidis, styli lobis clavatis. 7. P. *clavata*, stylo apice clavato, brevissimè bifido, stigmatibus complanatis recurvis. 8. P. *racemosa*, pubescens, foliis oblongis basi cordatis, verticillastris multifloris, styli lobis clavatis. 9. P.? *hirsuta*, hirsutissima, calycibus breviter 5-dentatis, foliis lato cordatis, verticillastris multifloris paniculato-racemosis. The *Prasium parviflorum* Gaudich. l. c. t. 65, appears to be a distinct species from all the above.

88. Stenogyne. *Benth.*—Calyx ovato-campanulatus, 10-nervis, subæqualis, nunc 5-fidus, lobis ovatis foliaceis, nunc breviter 5-dentatus. Corolla tubo exserto incurvo, fauce inflatâ, bilabiata, labiis subæqualibus: superiori erecto emarginato: inferiori patente 3-fido, lobis subæqualibus. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis divaricatis. Stylus apice subæqualiter bifidus, lobis subulatis. Achenia carnosa. Verticillastra in axillis foliorum caulinorum.

The Horticultural Society's Sandwich Island collection contains the following species of this genus also: 1. S. *rugosa*, foliis rugoso-nervosis, calycibus aridis acutè dentatis. 2. S. *scrophularoides*, foliis læviusculis, calycibus herbaceis obtusè dentatis. 3. S. *macrantha*, hirsutissima, calycis lobis foliaceis.

89. Gomphostemma. *Wall.* — Calyx ovatus v. tubulosus, subæqualis, 5-dentatus, nunc aristatus. Corolla tubo recto exserto, supra medium inflato, bilabiata, labiis subæqualibus, superiori erecto integro fornicato, inferiori patente trifido. Stamina 4, sub labio superiori ascendentia. Antheræ biloculares, loculis parallelis transversalibus. Stylus apice subæqualiter bifidus, lobis subulatis. Achenia carnosa.

Besides the species enumerated by Dr. Wallich in his Catalogue of the East India Company's collections, the Prasium *javanicum* and *phlomoides* Blume should probably be referred to this genus."



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1293

LEUCOCÓRYNE* odoráta.

Sweet-scented Leucocoryne.

◆

TRIANDRIA *MONOGYNIA.*

Nat. ord. Asphodeleæ.

LEUCOCORYNE. — *Perianthium* hypocrateriforme, cum pedicello continuum, limbo 6-partito. *Stamina* 3 fertilia è tubo exorta; tria sterilia carnosa teretia è fauce laciniis corollinis opposita. *Squamæ* hypogynæ nullæ. *Ovarium* sessile, triloculare, polyspermum; *stylus* teres, cum ovario articulatus; *stigma* simplex.——Herbæ (*Chilenses*), cormis *induviatis.* Flores *umbellati.*

L. *odorata;* foliis linearibus glaucis, limbi laciniis lanceolatis sublaciniatis, staminibus sterilibus subulatis obtusis, pedunculis subæqualibus tubo brevioribus.

Folia *debilia, valdè glauca, linearia, scapi pedalis longitudine.* Scapus *teres.* Involucrum *bifolium, floribus brevius.* Umbella 3-4-*flora.* Flores *albi, odorem Oxyacanthæ debilem spirantes, pedicellis æqualibus duplò brevioribus.* Perianthium *hypocrateriforme; tubo subcylindraceo, atro-viridi, circà medium subtumido;* limbo *patente,* 6-*partito: laciniis subæqualibus subrecurvis, corollinis nunc laciniatis.* Stamina *fertilia* 3, *è medio tubo exorta, subsessilia,* 3 *sterilia laciniis corollinis opposita, subulata, obtusa, è fauce, nunc, nec raro, antherifera;* antheræ *ovatæ, biloculares, longitudinaliter intùs dehiscentes.* Ovarium *superum, obovatum, cylindraceum,* 3-*loculare, polyspermum, apice truncatum, intrusum;* stylus *staminibus inferioribus demissior, teres, cum ovario articulatus:* stigma *simplex, papillosum.*

This pretty little plant was found by Mr. M'Rae, in November 1825, along with two other species, upon the sides of the mountains lying between St. Jago and Valparaiso, in places where the snow had been a few days melted. It is rather delicate, requiring in this country the protection of a frame or greenhouse, when it produces its fragrant flowers in August. It is to be increased by offsets, and grows best in a light loamy soil in which some coarse white sand is mixed. It was received from Mr. M'Rae by the Horticultural Society in the spring of 1826, and flowered for the first time in August of the same year, at which period the drawing was made.

From Brodiæa this genus differs in the texture of its sterile stamens, and in the place of insertion of its fertile ones: it is also distinguishable by the want of hypogynous scales, which, although not much developed in Br. congesta, undoubtedly exist in Br. grandiflora, where, however, they have been overlooked by Dr. Hooker in the *Botanical Magazine*, both in his figure and description. The two other species above alluded to as having been found by Mr. M'Rae at the same time with this, were

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* From λευκὸς, white, and κορύνη, a club; in allusion to the club-like sterile stamens.

1. L. *ixioides;* foliis linearibus glaucescentibus, limbi laciniis oblongis laciniatis subæqualibus, staminibus sterilibus fusiformibus, pedunculis æqualibus tubo duplò longioribus.
   Brodiæa ixioides. *Bot. mag.*
2. L. *alliacea;* foliis linearibus . . . . . ., limbi laciniis erectis acuminatis subæqualibus, staminibus sterilibus clavatis, pedunculis valdè inæqualibus: longioribus capillaribus.
   Brodiæa alliacea. *Miers's travels.*

Nearly related to Brodiæa are two other unpublished genera, to which Dr. Hooker has made allusion in the *Botanical Magazine.* They are both characterised by the upper stamens or those opposite the corolline segments of the perianthium being fertile; but they differ from each other in the position and form of their stamina, and in the form of their perianthium.

One of these is marked in Mr. Douglas's papers Triteleia, which we suspect is a name furnished to him by Dr. Hooker. It may be characterised thus: —

TRITELEIA.

Perianthium hypocrateriforme, cum pedicello continuum, limbo 6-partito. *Stamina* 6, fertilia; tribus è fauce ante lacinias corollinas, tribus è tubo alternis. *Squamæ* hypogynæ nullæ. *Ovarium* pedunculatum, 3-loculare, polyspermum; *stylus* trigonus, cum ovario continuus; *stigmata* tria.——Herbæ (*Austro- et Boreali-Americanæ*) cormis *induviatis.* Flores *umbellati.*

1. T. *bivalvis;* foliis linearibus scapo (palmari) erecto duplò longioribus, involucri diphylli foliolis latis foliaceis erectis, staminibus superioribus infrà faucem exortis.

Found by Mr. M'Rae at the baths of Collina, near St. Jago in Chile, at the limits of the snow.

2. T. *uniflora;* foliis linearibus scapo (pedali) debili subæqualibus, involucro vaginante apice bifido pedunculo filiformi duplò breviore, umbellâ 1-florâ, staminibus superioribus infrà faucem exortis.

Found in Mendoza by Dr. Gillies, to whom we are indebted for a specimen.

3. T. *grandiflora;* foliis linearibus glaucis scapo erecto (2-pedali) brevioribus, involucro triphyllo patente membranaceo, umbellâ congestâ 5-6-florâ, staminibus superioribus suprà faucem exortis, lineâ elevatâ ad basin tumidâ è filamentis tubum decurrente.

Found in North-west America by Mr. Douglas. It is growing in the Garden of the Horticultural Society, where it flowers in July.

The other genus, which is the Brodiæa grandiflora of Nuttall, but not of Smith, is very nearly related to Allium, on which account it may be called *Hesperoscordum.* It serves to establish a transition from the tubular-flowered to the hexapetalous genera of Asphodeleæ, and is unquestionably no *Millea,* as has been supposed. The following is its essential character:

HESPEROSCORDUM.

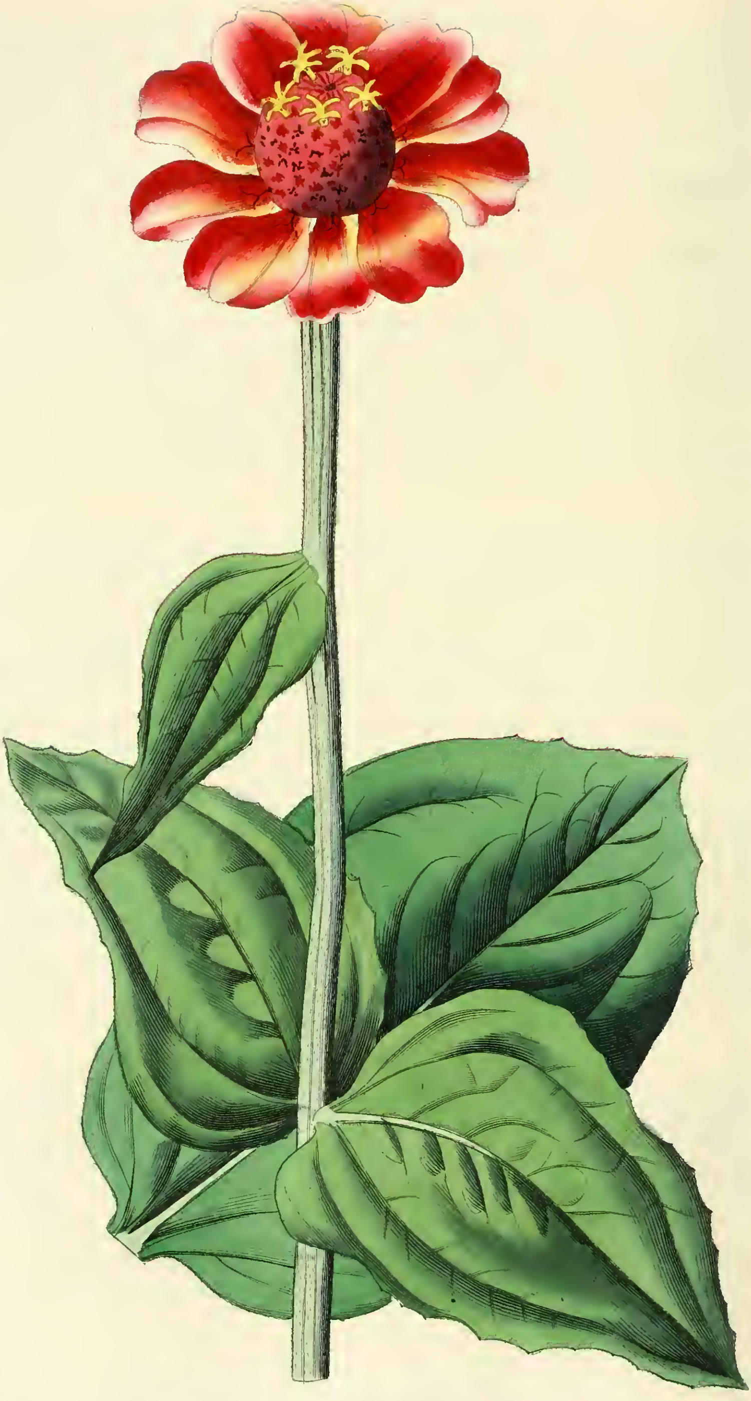
Perianthium campanulatum, 6-fidum, cum pedicello articulatum: laciniis calycinis acuminatis carinatis, corollinis obtusis. *Stamina* 6, fertilia, filamentis dilatatis membranaceis æqualibus è fauce exortis. *Squamæ* hypogynæ nullæ. *Ovarium* sessile, triloculare, polyspermum; *stylus* teres, cum ovario articulatus; *stigma* simplex. *Capsula* 3-locularis, 3-valvis, polysperma, valvis medio septiferis. *Semina* nigra, angulata, subcrustacea.—— Flores umbellati. Herba (*Boreali-Americana*) cormis *induviatis.* Flores *umbellati.*

Hesperoscordum *hyacinthinum.*
Brodiæa grandiflora. *Nuttall gen.* 215.

Native of the plains of the Missouri and of the north-west of America, in which last country it was found by Mr. Douglas.

J. L.

1294



ZÍNNIA* violácea; *var.* coccinea.

Scarlet Zinnia.

◆

SYNGENESIA *SUPERFLUA.*

Nat. ord. COMPOSITÆ. § Heliantheæ. *Cassini.*

ZINNIA.—*Involucrum* oblongo-campanulatum, aut hemisphæricum, polyphyllum, imbricatum. *Receptaculum* conicum, paleaceum. *Flosculi* disci tubulosi hermaphroditi; radii ligulati fœminei. *Achenia* disci compressa, apice emarginato-bidentata, dente altero sæpè aristato; *achenia* radii corollâ persistente coronata.——Herbæ *oppositifoliæ.* Folia *integra.* Flores *terminales, solitarii, lutei, coccinei, aut rariùs violacei.*—Kunth synops. 2. 489.

Z. *violacea;* foliis ovato-acutis sessilibus subconnatis, palearum apicibus fimbriato-serratis. *Cavanilles icones,* 1. 57. *t.* 81. *Pers. synops.* 2. 458. *Bot. rep.* 1. *t.* 55.

Z. elegans. *Jacq. ic. rar.* 3. *t.* 589. *collect.* 5. 152. *Willd. sp. pl.* 3. 2140. *Spreng. syst.* 3. 578.

Herba *annua, characteribus omninò* Z. violaceæ, *præter colorem flosculorum radii intensè coccineum.*

This splendid plant came up among some Mexican seeds presented to the Horticultural Society by J. S. Mill, Esq.

Its appearance was so entirely that of Zinnia violacea, that till it flowered its beauty was not suspected; and this unfortunately took place at so late a period of the recent rainy, sunless season, that we fear no good seeds of it were saved.

Our drawing was made in September, and may be the means of recovering the variety, which would no doubt be accomplished if persons in this country were to send the figure to their correspondents in Mexico. Such is the brilliancy of the scarlet, that no mixture of the most vivid colours will match it by many degrees.

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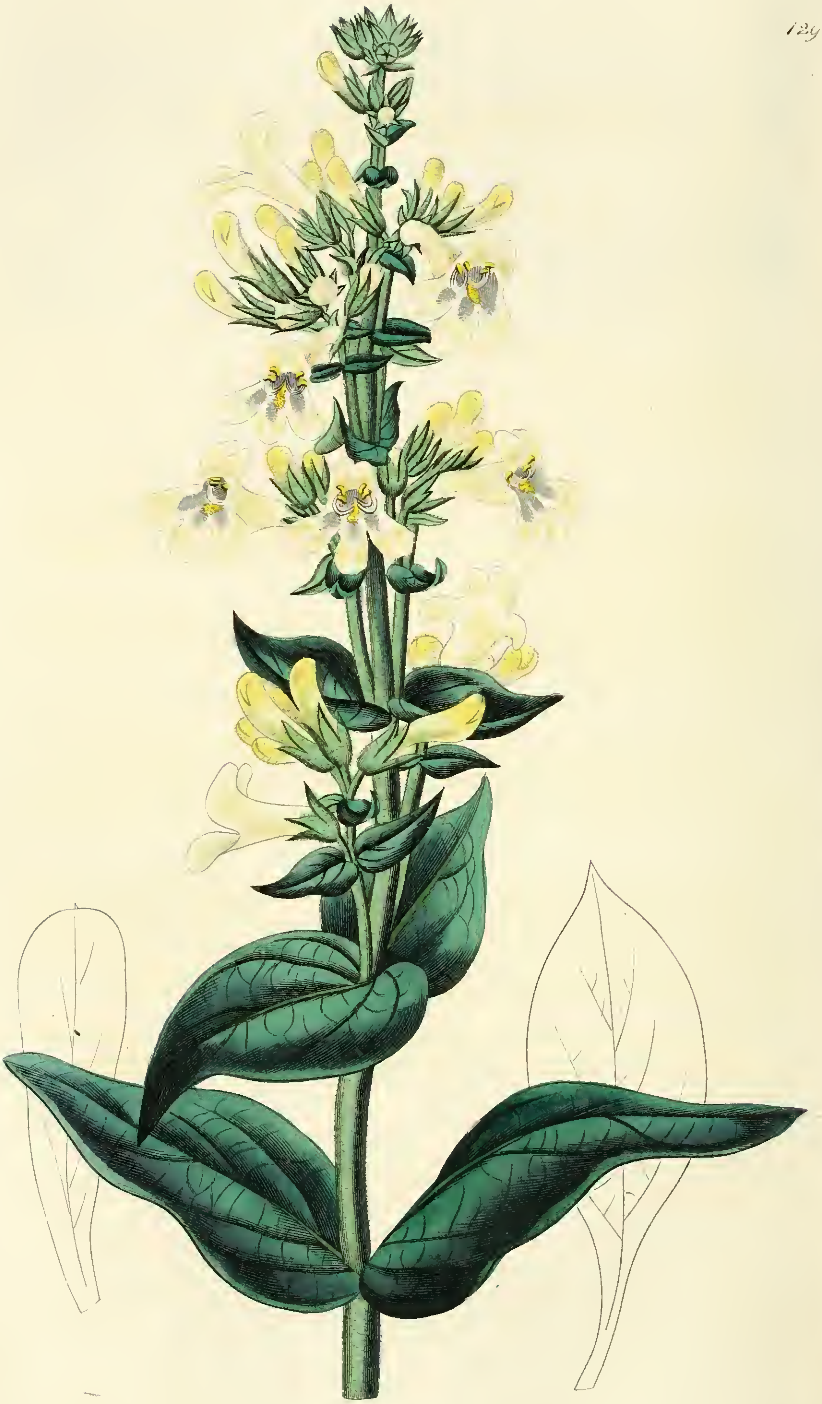
* Named in honour of John Gottfried Zinn, a professor of Botany at Göttingen; born in 1727, died in 1759. He is chiefly remarkable for having made some experiments to ascertain the cause of the irritability of plants. He asserted that the leaves of Desmanthus virgatus would move exactly the same in a damp, cold, dark cellar, as beneath the influence of the sun; whence he concluded it to be a vital phenomenon.

Although as an annual, Z. violacea is usually propagated by seeds, yet it strikes freely by cuttings taken off when the stems have just become woody; a fact which is worth knowing, in case the variety should be recovered.

J. L.

1295



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1295

PENTSTÉMON* attenuátum.

Taper-pointed Pentstemon.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. SCROPHULARINEÆ.
PENTSTEMON. — *Suprà, vol.* 13. *fol.* 1121.

P. *attenuatum;* caule stricto apice piloso, foliis radicalibus ellipticis acutis petiolatis, superioribus ovato-oblongis amplexicaulibus sessilibus, omnibus glaberrimis integerrimis, paniculâ strictâ calycibus corollisque pubescentibus, capsulis glaberrimis.

P. attenuatum. *Douglas in herb. Hort. Soc.*

Caulis *sesquipedalis 2-pedalisve.* Folia *atroviridia, glabra.* Flores *ochroleuci.* Folia *radicalia nunc cuneata, cuspidata.*

A native of the mountains of Lewis and Clark's River, where it was found by Mr. Douglas. Our drawing was made in the Garden of the Horticultural Society in August last.

One of the hardiest of its handsome genus, growing from 1½ to 2 feet high, and freely in any kind of garden mould: propagated readily by division of its spreading roots. It flowers from July to the end of September.

The species is chiefly remarkable for the deep green of the leaves, and the delicate cream colour of the flowers.

J. L.

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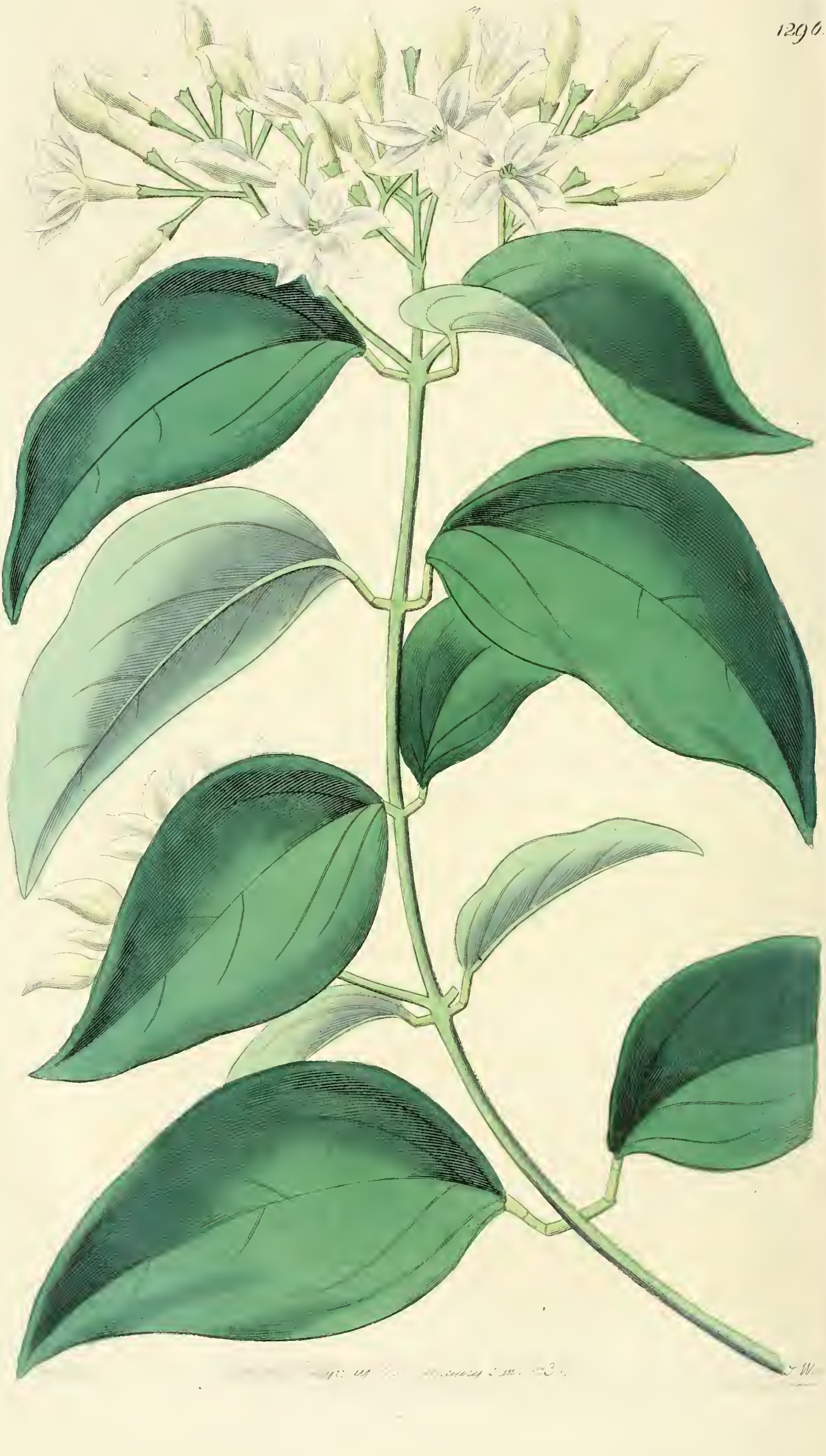
* See fol. 1245.

1290.



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1296

JASMÍNUM* acuminátum.

Pointed-leaved Jasmine.

DIANDRIA *MONOGYNIA.*

Nat. ord. JASMINEÆ.
JASMINUM.—Suprà, vol. 1. *fol.* 89.

J. *acuminatum;* foliis (simplicibus) ovatis acuminatis glabris, petioli articulo superiori 5-6ies longiore, calycibus campanulatis: dentibus brevissimis.—*R. Brown prodr.* 521.

Rami *teretes, scandentes, glabri.* Folia *simplicia, ovata, acuminata, lucida, glaberrima, petiolo in medio articulato: dimidiâ superiore inferiore paulò longiore* (*an igitur species nostra reverà Brunoniana*). Flores *paniculati, paniculis nunc diffusis, nunc corymbosis, ramis pedunculisque divaricatis.* Calyx *campanulatus, dentibus obsoletis.* Corolla *alba, limbo sæpiùs 6-partito: laciniis ovatis.*

Raised from seeds from the banks of the Hastings, in New South Wales, by the Honourable and Rev. William Herbert, to whom we are obliged for specimens. It is probably the species to which we have referred it, although we cannot reconcile that part of Mr. Brown's character in which the upper joint of the petiole is described as five or six times as long as the lower, with the specimens we have examined.

A greenhouse plant, propagated by cuttings, and flowering in November.

Branches taper, climbing, smooth. *Leaves* simple, ovate, acuminate, shining, quite smooth; the petiole articulated

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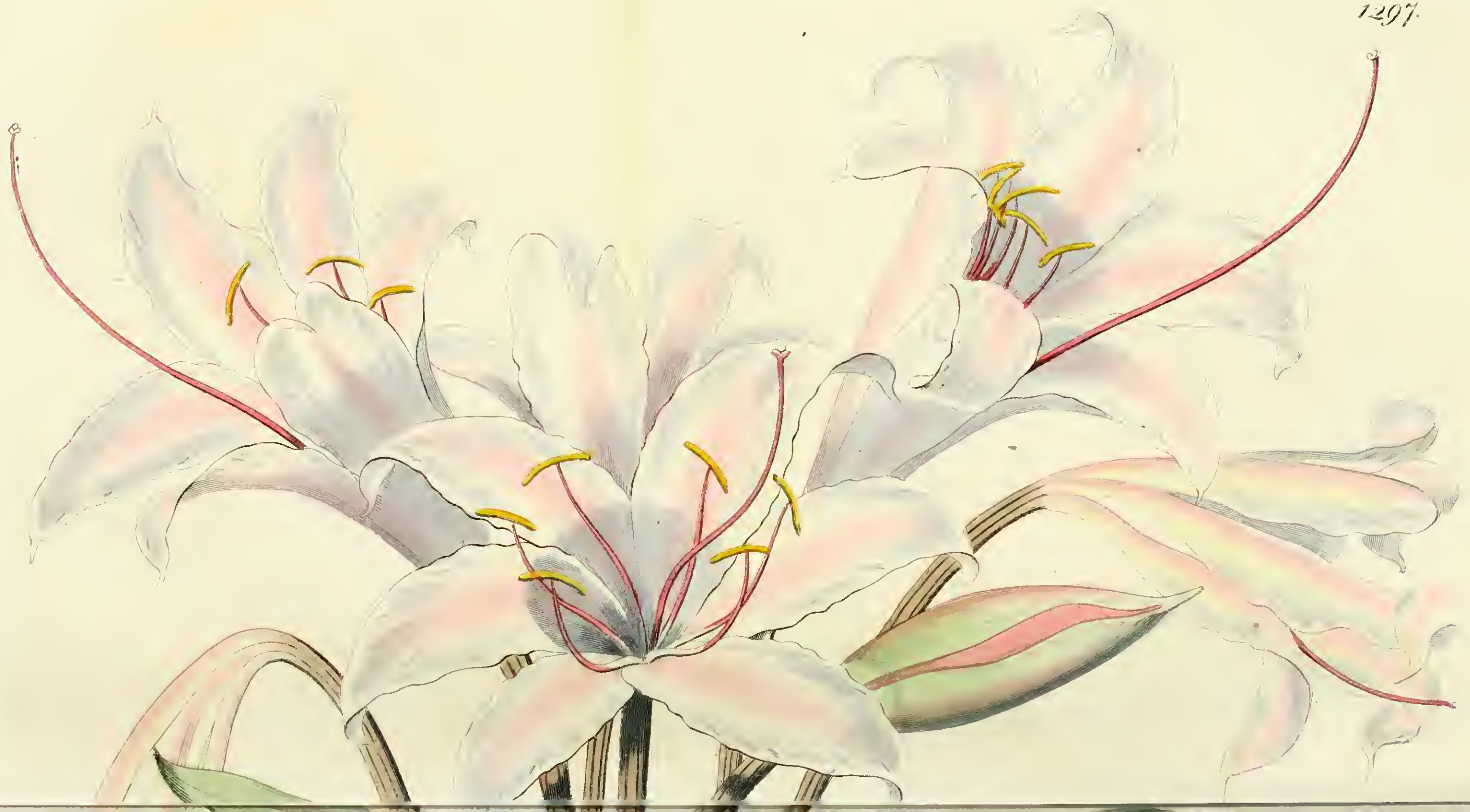
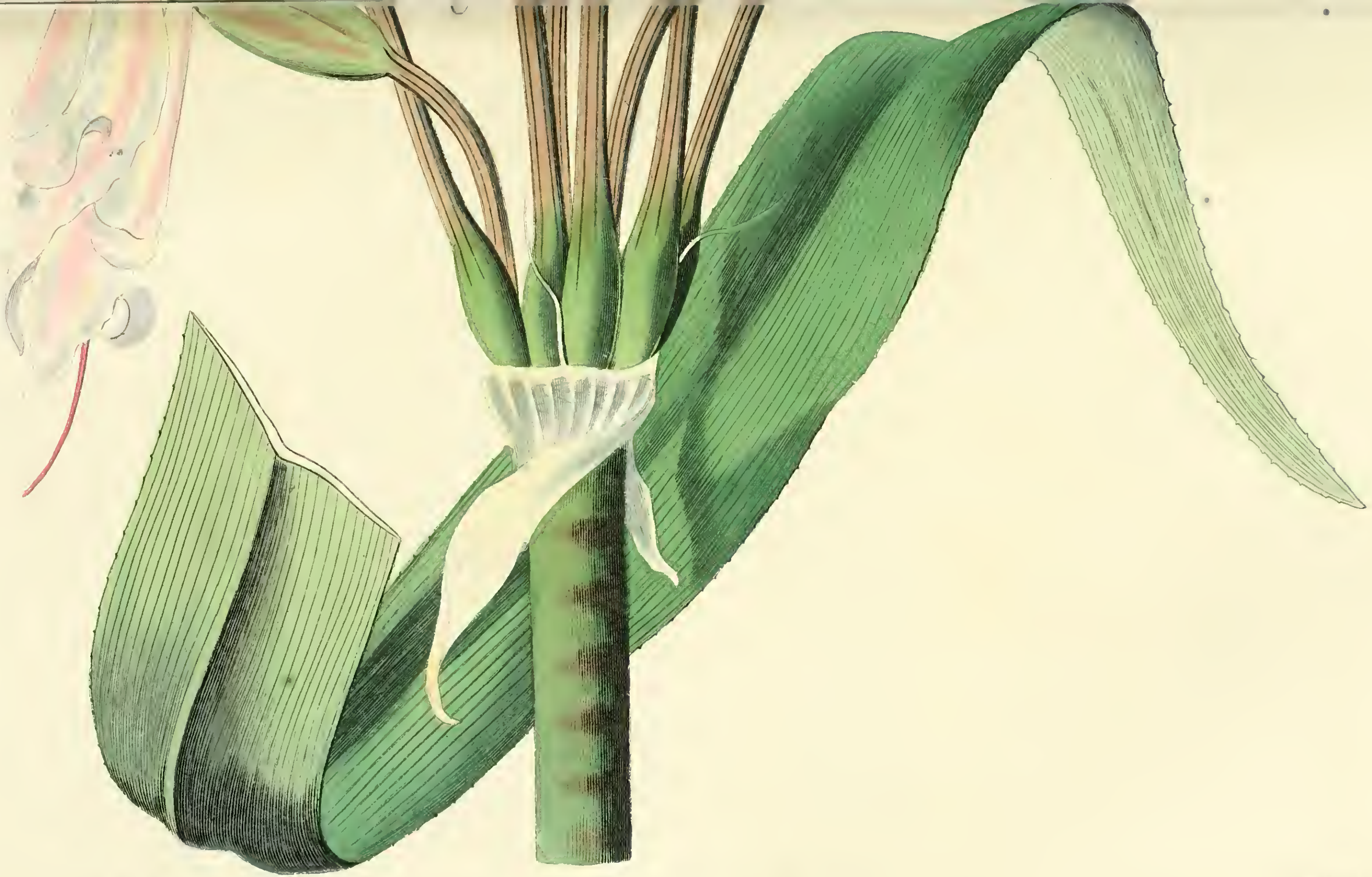
* Linnæus ingeniously derives this word from ἴον, a violet, and ὀσμὴ, scent; but, according to De Théis, it is rather an alteration of *ysmyn*, the Arabic name of one of the species.

in the middle, the upper joint being rather longer than the lower. *Flowers* panicled, the panicles either diffuse or corymbose, the branches and peduncles straggling. *Calyx* campanulate, with obsolete teeth. *Corolla* white; the limb usually 6-parted, with ovate segments.

J. L.

1297.





Hart del.   [illegible] by Ridgway Ja. 1 1 8   S. Watts sc.

1297

CRÍNUM* latifólium.

Broad-leaved Crinum.

HEXANDRIA *MONOGYNIA.*

Nat. ord. AMARYLLIDEÆ.
CRINUM. — *Suprà, vol.* 1. *fol.* 52.

C. *latifolium;* bulbo sphærico, foliis lanceolatis undulatis margine scabris, spathâ 10-12-florâ, floribus sessilibus: tubo declinato cylindrico obsoletè trigono, limbo campanulato horizontali: laciniis lanceolatis subundulatis.
C. latifolium. *Linn. sp. pl.* 1. 419. *Ker in journ. of sc.* 1817, *addend.*
Amaryllis latifolia. *L'Hérit. sert. angl.* 14. *Willd. sp. pl.* 2. 57. *Ker in journ. of sc. no.* 45 (1817). *Spreng. syst.* 2. 52.
Sjovanna-pola-tali. *Rheede malab.* 11. 77. *t.* 39.

For our figure of this fine and very rare species of Crinum we are indebted to the Right Honourable the Earl of Caernarvon, in whose noble collection at Highclere the drawing was made, as long since as December 1825.

Mr. Gowen remarks to us, that it is most closely allied to Crinum speciosum, moluccanum, insigne, &c. It is a shy flowerer, and tender, as are most of its oriental congeners, which are very impatient of drip in the heart of the leaves, and require alternate periods of rest and quick active vegetation.

This bulb was sent to Lord Caernarvon many years since by Dr. Wallich, who has been so kind as to favour us with the following important extract relating to it from Dr. Roxburgh's MS. Flora Indica:—

" A native of Bengal, where it begins to blossom with the first showers in April, and continues to do so during the early part of the rainy season. I long considered this most stately plant a variety of *Amaryllis lineata,* Lamarck *Encyclop.* 1. 123, (which I am still inclined to consider a Crinum); but on taking up some of the bulbs of both sorts sent to England, I observed a greater difference in their appearance than can be traced in the parts above ground, though even there their disagreements are sufficiently conspicuous to justify the separation. The following description will be found more comparative than usual with me, on account of their resemblance; and no doubt both belong to *Crinum*, at least to the same genus with our *East India Crinums*. I do not, therefore, think L'Héritier, and after him Willdenow, have rendered Botany any service by changing the place of C. *zeylanicum* and *latifolium*.

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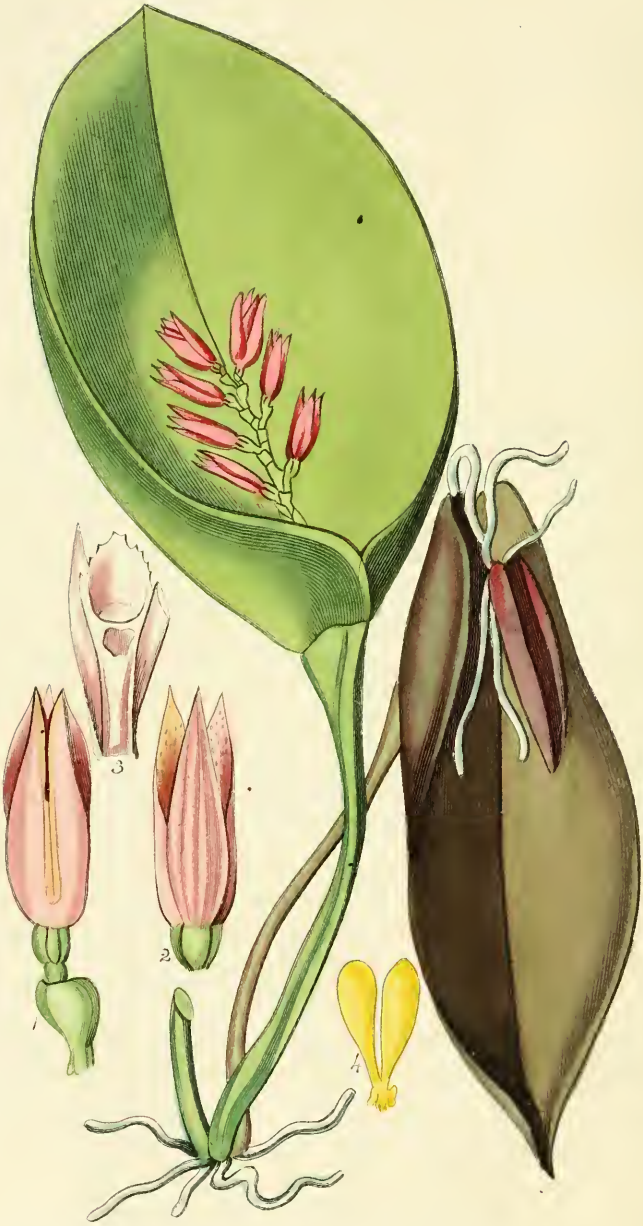
* The κρινον of the Greeks is supposed to have been Lilium candidum.

" *Root* a spherical, tunicated bulb, often 2 feet in circumference, and rather more flattened at the base than at the opposite end;—in *lineatum* it is ovate, never so large, and abounds more in cobweb-like fibres. *Leaves* numerous, radical, disposed equally on all sides, lanceolate, waved, smooth, tapering from within a few inches of the base to rather an obtuse point; margins scabrous, with minute cartilaginous denticules, length from 1 to 3 feet, and from 3 to 5 inches broad;—in *lineatum* narrower, ribs much more prominent, length as far as 3 feet, margins greatly more waved, and perfectly smooth: this mark alone is sufficient to distinguish the two plants. *Scapes* from the axils of the decayed leaves, somewhat compressed, as thick as a man's thumb, and from 12 to 24 inches long;—in *lineatum* longer, and coloured. *Umbels* with from 10 to 20 flowers;—in *lineatum* rarely so many. *Spathes* (in both) two, of an ovate-conic form, with many soft filaments mixed amongst the flowers. *Flowers* sessile, large; *tube* green; *border* pale rose, almost white, faintly fragrant, particularly when they first expand, soon after sunset;—in *lineatum* they are scarce so large, and the colours much more bright, almost like *vittata*. *Corolla*, tube declinate, cylindric, obscurely 3-sided, about 4 inches long. Border campanulate, horizontal; segments lanceolate, with rather soft subulate points, length between 3 and 4 inches. *Fil.* 6, shorter than the segments of the border of the corolla, inserted on the mouth of the tube, declinate, with apices sharp, and always erect. *Anthers* falcate, incumbent, and tremulous, pale yellowish gray;—in *lineatum* they are brown. *Germ* inferior, oblong, 3-celled, with several seeds in each, attached in two vertical rows to the two lobes of the thick, fleshy receptacles, which are substantially united to the wall of the germ, and *seemingly* so to each other in the centre;—C. *lineatum* and our other Indian *Crinums* have exactly the same germ, and all produce large bulbous seeds. *Style* filiform, declinate, and projecting beyond the stamina. *Stigma* small, 3-toothed. *Pericarpium* a soft, somewhat fleshy, perishable envelope, which covers one, two, or three, rarely more, large, fleshy, bulbiform seeds; no trace of either partitions or sutures to be found."

J. L.

1298.



1298

PLEUROTHÁLLIS* prolífera.

Proliferous Pleurothallis.

GYNANDRIA *MONANDRIA*.

Nat. ord. ORCHIDEÆ. § Malaxideæ *Lindley*. * Pleurothalleæ.
PLEUROTHALLIS. — *Suprà, vol.* 9. *fol.* 759.

P. *prolifera;* caule ancipiti, folio oblongo cochleato carnoso prolifero racemo duplò longiore, bracteis cuneatis cuspidatis cucullatis pedicello brevioribus, sepalis conniventibus lateralibus semiconnatis petalis labelloque conformibus duplò longioribus, clinandrio dentato. — *Lindley Gen. and Sp. of Orchideous Plants, part* 1. *ined.*

P. prolifera. *Herbert in litteris.*

Epiphyta, caulibus *monophyllis, flexuosis, palmaribus, basi teretibus, apice compressis obtusè marginatis.* Folia *crassa, carnosa, avenia, cucullata, ovato-oblonga, acuta, semper prolifera.* Racemus *simplex, brevis, ex axillâ folii in cujus sinu recumbit, pauciflorus, folio brevior, basi squamis paucis, scariosis, acutis;* rachis *flexuosa;* bracteæ *solitariæ, membranaceæ, herbaceæ, cucullatæ.* Flores *lurido-purpurei, intùs punctati, brevè pedunculati.* Ovarium *brevissimum, turbinatum.* Sepala *carnosa, conniventia, acuminata, basi connata, lateralibus semicohærentibus.* Petala *linearia, acuminata, columnæ longitudine.* Labellum *lanceolatum, integerrimum, sepalis paulò brevius.* Columna *clavata, semiteres.* Clinandrium *alatum, denticulatum.* Anthera *bilocularis.* Pollinia 2, *teretia, basi materie pulvereâ cohærentia.*

For this curious plant we are indebted to the Honourable and Rev. William Herbert, by whom we were favoured with specimens in January last. Mr. Herbert informs us, that it was found at Boto Fogo, near Rio Janeiro, growing on a steep rock, which the sun could rarely shine upon.

At Spofforth it flowers six or seven months in the year, producing successive racemes year after year. It likes a shady end of the stove, and to throw its roots about in the air. It will probably grow better in moss half decayed than in any other material.

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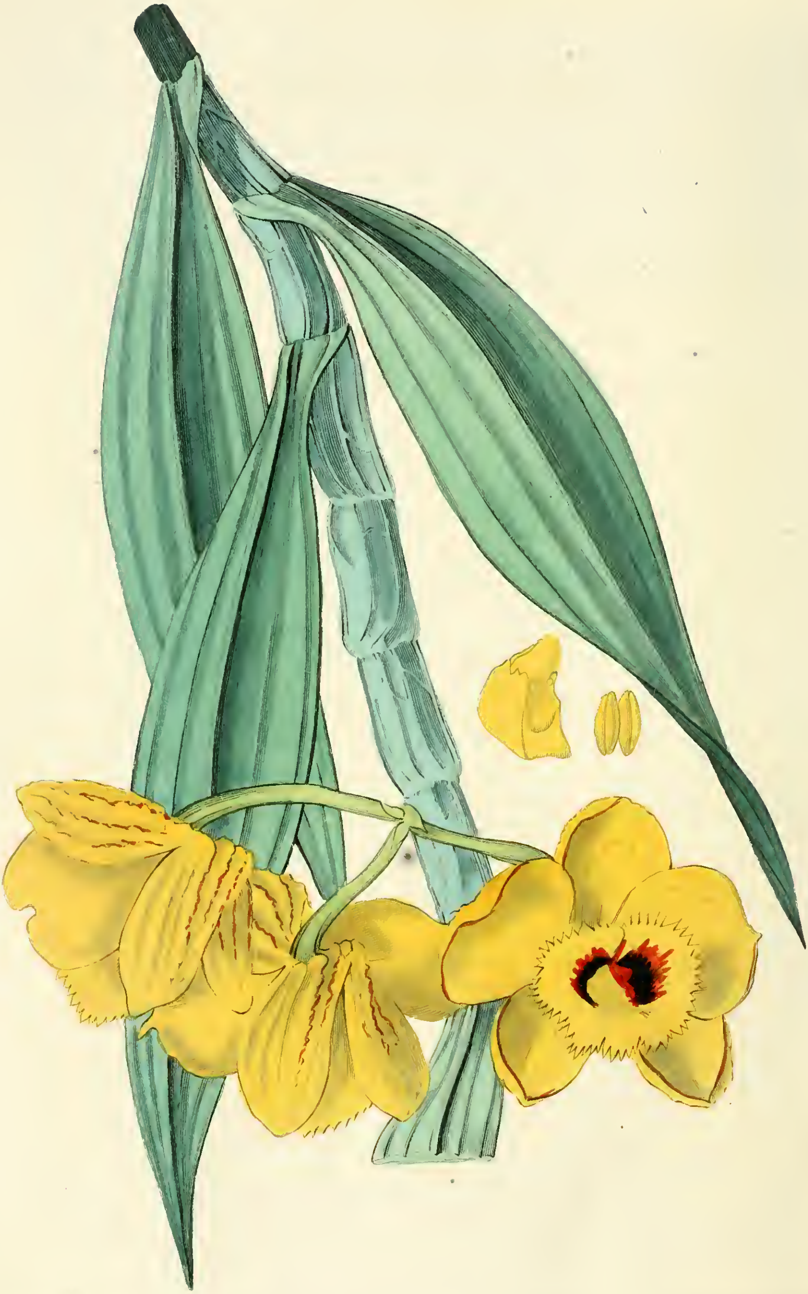
* So named from *πλευρὰ*, a side or rib, and *ϑάλλω*, to flower; in allusion, we presume, either to the one-sided disposition of the flowers of some species, or to the developement of the inflorescence from what appears to be the rib of the leaves.

It is remarkable for the proliferous character of its leaves. These constantly produce young rooting plants from their axillæ; and, what is singular, the first leaf of each new individual is produced from the same side of the axis of the mother plant as the old leaf from which it sprung. This apparent exception to the universal laws under which leaves are developed, is due to the abortion of the first leaf that is developed, which appears in the form of a withered scale, while the second leaf is that which is finally and fully developed.

J. L.

1299.



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DENDRÓBIUM* chrysánthum.

Golden-flowered Dendrobium.

GYNANDRIA *MONANDRIA.*

Nat. ord. Orchideæ. Tribus *Malaxideæ.* * Dendrobieæ *Lindl.*
DENDROBIUM. — Suprà, vol. 7. fol. 548.

§ *Caules undique foliosi, cylindracei, sæpè penduli. Flores fasciculati v. solitarii.*

D. *chrysanthum;* caulibus teretibus pendulis, foliis contortis ovato-lanceolatis acuminatis, floribus ternatis inter folia nascentibus, sepalis carnosis oblongis obtusis: venis extùs tuberculatis, petalis obovatis retusis carnosis sepalo supremo latioribus, labello cucullato denticulato retuso obsoletè trilobo. *Lindl. Gen. et Sp. Orch. ined.*

D. chrysanthum. *Wallich cat. no.* 2012.

Flores *intensè lutei, carnosi, extùs tuberculis crebris minuti;* petala *tamen minùs tuberculata.* Labellum *intùs maculâ atrosanguineâ.* Ibid.

This beautiful species is a native of Nipal, whence it was introduced into the Botanic Garden, Calcutta, by Dr. Wallich, and by that zealous Botanist brought to England in the year 1828. The plant from which the accompanying figure was taken blossomed in a stove in the Horticultural Society's Garden, in February 1829: it had been presented to that establishment by the Honourable Court of Directors of the East India Company.

It is difficult to conceive a plant at once more graceful and beautiful than this; its pendulous stems, which hang from the rugged, deep brown, moss-clad trunks of trees, are clothed with lucid leaves of the most lively green, and its flowers are of the richest and deepest yellow. At first sight the species might be mistaken for D. fimbriatum, but it will be found very different upon comparison.

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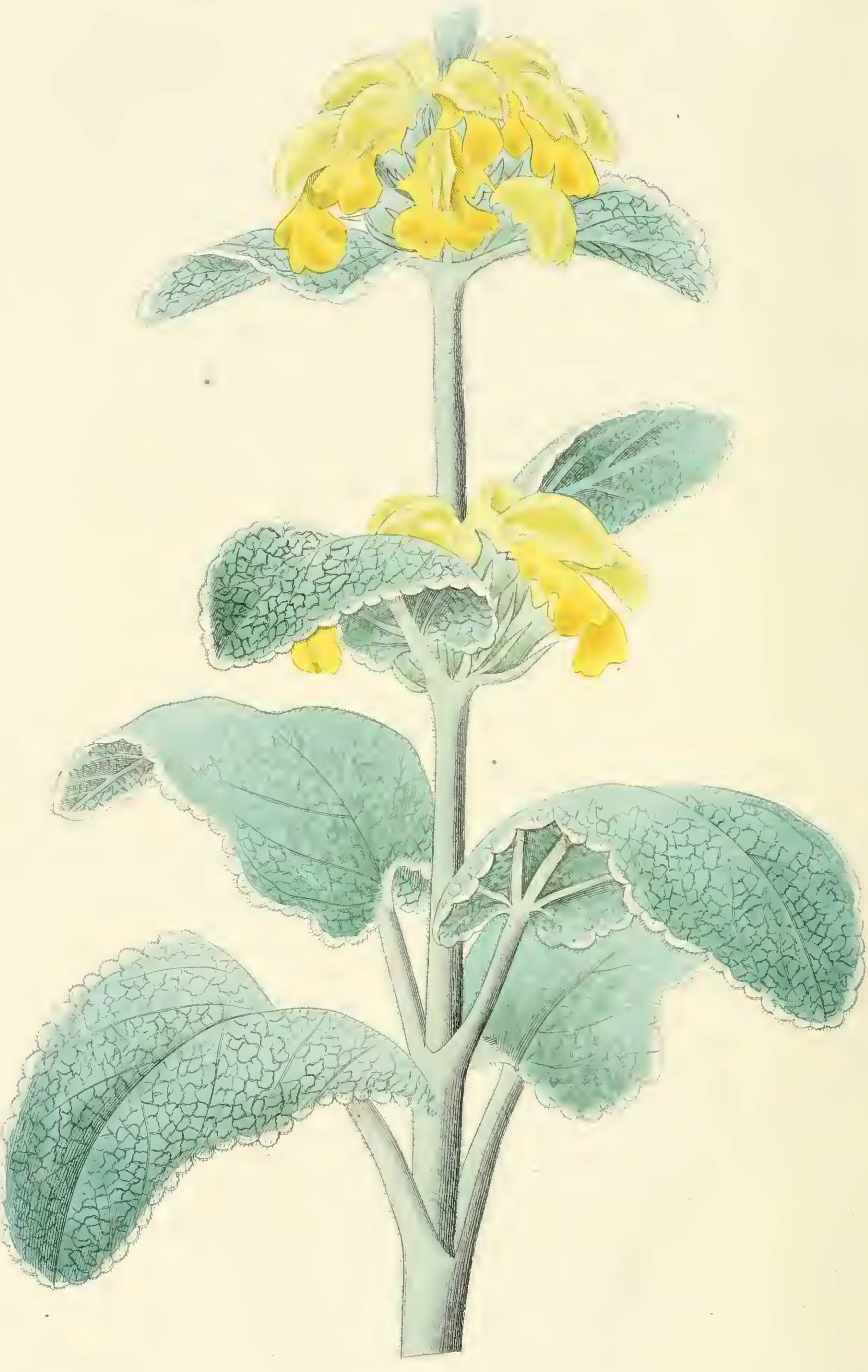
* See fol. 1239.

Most cultivators of stove Orchideous plants find a difficulty in managing the particular tribe to which this belongs; that difficulty is, however, completely overcome in the Garden of the Horticultural Society, in which these flourish more than almost any others. In that establishment they are treated thus: they are planted in perfectly rotten wood in small pots, which are covered with moss tied securely about them; these pots are suspended *obliquely* from the rafters of the front part of a small stove, in such a way that the plants are not compelled to grow upright, but are allowed to assume the pendulous or horizontal position, which is natural to them. Thus treated, species of the true Dendrobium habit, such as D. chrysanthum, flourish in a degree which is at least equal to that of their native woods. The temperature of such a stove should never fall below 75°, and the dew point should be always near saturation.

J. L.



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PHLÓMIS* floccósa.

Flocculent Phlomis.

DIDYNAMIA *GYMNOSPERMIA.*

Nat. ord. LABIATÆ. Tribus 5. *Nepeteæ.* Bentham.
PHLOMIS L. — *Suprà, fol.* 1289. Bentham in notis.

P. *floccosa*, floccoso-lanata ; foliis cordato-oblongis, calycis dentibus bracteisque subūlatis uncinato-revolutis, corollæ labiis adpressis, caule fruticoso.—*Don in litt.*

Planta *fruticosa, bipedalis, diffusè ramosa, lanâ è pilis stellato-ramosissimis compositâ, floccosâ, niveâ, densè obruta.* Rami *patentes, tetragoni, quandoque decumbentes.* Folia *opposita, petiolata, cordato-oblonga, obtusissima, crenata, recurvato-patentia, suprà rugosissima, subtùs reticulato-venosa, venis prominentibus, palmaria v. paullò longiora:* posticibus *distinctis, rotundatis, sæpè sursùm flexis.* Petioli *pollicares v. bipollicares, subtùs rotundati, suprà canaliculati, basi parùm dilatati, connati.* Flores *subtriplici ordine conferti, sessiles, verticillati:* verticillis *convexiusculis.* Bracteæ *duplici ordine digestæ, numerosæ, lineari-subulatæ, calycibus subæquales, apicibus spinescentibus, glabris, uncinato-revolutis.* Calyx *tubulosus, 5-angulus, limbo 5-plicatus, basi parùm attenuatus, longitudine semuncialis, pube stellatâ copiosissimè vestitus:* dentibus *patentibus, subulatis, apice spinescentibus, uncinato-revolutis.* Corolla *flava, magna:* tubus *medio constrictus, intùs villis clausus, supernè dilatatus, subcompressus:* labiis *adpressis, pube stellatâ vestitis ;* superiore *cucullato, compresso, dorso planiusculo, subdepresso, margine abruptè dilatato et parùm revoluto, apice truncato, levissimè 4-lobo ;* inferiore *longiore, planiusculo, trilobo ;* lobo intermedio *maximo, cuneato-dilatato, emarginato ;* lateralibus *bidentatis ;* dente anteriore *abbreviatissimâ, rotundatâ.* Stamina 4, *fauci inserta ;* duo anteriora *paullò longiora:* filamenta *teretia, arcuata, villis simplicibus barbata:* antheræ *compressæ, uniloculares, filamenti apici dilatato parallelo adnatæ, longitudinaliter dehiscentes.* Ovaria 4, *disco carnoso imposita, minutè papillosa, hinc convexa, inde compressa, subcarinata.* Stylus *filiformis, apice arcuatus.* Stigma *obtusè bidentatum, pruinosum ;* dente anteriore *minimo, ferè obsoleto. Cariopsides maturos nondùm vidi.* — Don.

"This very distinct species of *Phlomis* was raised from a collection of Egyptian seeds presented to Mr. Lambert by Mr. Greenough, to whom they had been sent by Mr. Burton, who has been residing several years in Egypt ; but the particular district where the seeds were collected was not mentioned. It flowered in the greenhouse at Boyton, in the beginning of November. The plant appears to thrive luxuriantly ; but I do not think it is likely to prove hardy. The hooked points of the bracteæ and calycine teeth essentially distinguish it, independently of any other characters, from all the frutescent species of *Phlomis* hitherto recorded."

To Mr. Lambert we are indebted for the opportunity of figuring this plant ; and to Mr. Don for the specific character, description, and remarks upon it.

Mr. Bentham having supplied us with the conclusion of his characters of the tribes and genera of Labiatæ, they are given below.

J. L.

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[*] Φλόμος was the Greek name of the Verbascum, which this resembles in the leaves.

(Continued from fol. 1292.)

Tribus 7. OCYMOIDEÆ.

Corolla bilabiata. Stamina declinata.

90. Moschosma. *Reichenb.* (Lumnitzera. *Jacq.* non *Willd.*)—Calyx ovatus, 5-dentatus, dente superiori majore, marginibus non decurrentibus, post anthesin patens. Corolla tubo calyce subbreviore, bilabiata, labio superiori breviter quadrifido, inferiori integerrimo subplano. Stamina 4, declinata. Filamenta libera, edentula. Antheræ ovato-reniformes, loculis confluentibus. Stylus apice clavato-capitatus, brevissimè bifidus. Verticillastri pauciflori, secundi, racemosi, racemis paniculatis.

I am only acquainted with two species, *Lumnitzera ocymoides* and *polystachya* Jacq.

91. Ocymum. *Linn.*—Calyx ovatus v. campanulatus, 5-dentatus, dentis superioris ovato-membranacei marginibus decurrentibus alatus, post anthesin reflexus. Corolla tubo calyce subbreviore, bilabiata, labio superiori quadrifido, inferiori integerrimo subplano. Stamina 4, declinata. Filamenta libera, superiora basi sæpiùs dentata v. penicillata. Antheræ ovato-reniformes, loculis confluentibus. Stylus apice subulatus, æqualiter bifidus. Verticillastri sæpiùs multiflori, interruptè spicati, spicis subsimplicibus v. densè thyrsoideo-paniculatis.

Besides nearly the whole of the species enumerated by Sprengel, I should consider the O. *monachorum* Linn. (which appears to me to be the same as O. *sanctum* Linn.), and also the O. *tenuiflorum* Linn. as true Ocyma; for I do not attach much importance to the presence or absence of the tooth of the upper filaments.

92. Orthosiphon. *Benth.*—Calyx ovatus v. tubulosus, 5-dentatus, dentis superioris ovato-membranacei marginibus decurrentibus alatus, post anthesin reflexus. Corolla tubo exserto recto, fauce æquali v. rariùs inflatâ, bilabiata, labio superiori 3-4-fido, inferiori integerrimo concavo. Stamina 4, declinata. Filamenta libera, edentula. Antheræ ovato-reniformes, loculis confluentibus. Stylus apice clavato-capitatus, subinteger v. brevissimè bifidus. Verticillastri subsexflori, interruptè racemosi, racemis elongatis subsimplicibus.

Dr. Wallich's collections contain eight or nine species of this genus, to which should be referred *Ocymum triste* Roth.; and perhaps also *Ocymum asperum* and *thymiflorum* Roth., and O. *adscendens* Willd.

93. Coleus. *Lour.* — Calyx ovato-campanulatus, 5-dentatus, dente superiori ovato-membranacco marginibus rariùs decurrentibus, post anthesin erectus v. reflexus. Corolla tubo exserto refracto v. gibbo, fauce æquali v. inflatâ, bilabiata, labio superiori 3-4-fido, inferiori integro elongato concavo, genitalia involvente. Stamina 4, declinata. Filamenta edentula, basi tubo stylum vaginante connexa. Antheræ ovato-reniformes, loculis confluentibus. Stylus apice subulatus, æqualiter bifidus. Verticillastri sæpiùs multiflori, nunc densè, nunc interruptè, spicati v. racemosi, spicis subsimplicibus v. rariùs paniculatis.

The above character would comprehend *Plectranthus barbatus* Andr. bot. rep. (which is the P. *comosus*, bot. mag., P. *Forsköhlii* bot.mag., an Willd.? and perhaps *Ocymum monadelphum* Roth., (and which even agrees well enough with Loureiro's character of *Coleus amboinicus*), *Ocymum scutellarioides* Linn., all Blume's *Plectranthi*, and seven or eight new East Indian species.

94. Plectranthus. *L'Hér.*—Calyx per anthesin campanulatus, 5-dentatus, dentibus æqualibus v. superiori sæpiùs majore, post anthesin patens, incurvus, basi gibbus v. inflatus, ore sæpè bilabiatus, v. rariùs erectus, tubulosus, æqualis. Corolla tubo exserto gibbo calcarato refracto v. rariùs subrecto, fauce æquali v. rariùs inflatâ, bilabiata, labio superiori 3-4-fido, inferiori longiore concavo. Stamina 4, declinata. Filamenta libera, edentula. Antheræ ovato-reniformes, loculis confluentibus, v. rariùs biloculares, loculis divaricatis. Stylus apice subulatus, æqualiter bifidus. Verticillastri laxi, sæpiùs cymosi, multiflori, racemoso-paniculati.

This genus may be divided into four sections: 1. Plectranthi veri; *calyce fructifero patente, basi incurvo gibbo v. inflato, corollæ tubo refracto v. gibbo;* including P. *coetsa* Hamilt., *maypurense* Spr. (P. *cordifolia* Don), *australis* Br., *glandulosus* Br., *congestus* Br., *parviflorus* Willd., and probably also P. *caninus* Roth., *Ocymum salvioides* Roth., and O. *densiflorum* Roth., besides eleven or twelve new species from India, three or four from Madagascar, and one from the west coast of Africa. 2. Germanea; *calyce fructifero patente bilabiato, corollæ tubo calcarato;* containing P. *fruticosus* L'Hér., and a new species from Madagascar in Dr. Hooker's herbarium. 3. Pyramidium; *calyce fructifero erecto æquali tubuloso, corollæ tubo refracto.* P. *ternifolius* Don. 4. Amethytoides; *calyce fructifero vix aucto subæquali campanulato, corollæ tubo recto v. subgibbo;* comprising two or three new species from China, as also probably the P. *nudiflorus* Willd., from that country.

95. Geniosporum. *Wall.* — Calyx ovato-tubulosus, margine membranaceus, irregulariter 5-dentatus, fructifer suberectus, dentibus nunc patulis, nunc inferioribus inflexis, basi transversè rugosus. Corolla tubo calycem subæquante, labio superiori quadrifido, inferiori integerrimo subplano. Stamina 4, declinata. Filamenta libera, edentula. Antheræ ovato-reniformes, loculis confluentibus. Stylus apice bifidus, lobis sæpiùs dilatato-complanatis. Verticillastri multiflori, laxè spicati, spicis subsimplicibus.

Besides the *Ocymum prostratum* Linn., I should comprehend under Geniosporum five or six new species from the East Indies, Ceylon, and Madagascar.

96. Mesona. *Blume Bijdr. p.* 838.—Blume's description is not detailed enough to determine whether this genus be really distinct from Geniosporum.

97. Acrocephalus. *Benth.*—Having, since I gave the character of this genus in 1282 of the *Register*, had opportunities of examining more perfect specimens of two of the species, I have been enabled to ascertain that it belongs rather to the *Ocymoideæ* than to the *Menthoideæ*. The character may be thus amended :—Calyx ovatus, bilabiatus, labio superiori integro, inferiori integro v. quadridentato, fructifer tubulosus basi gibbus. Corolla calycem subæquans, bilabiata, labio superiori quadrifido, inferiori integro subplano. Stamina 4, declinata. Filamenta libera, edentula. Antheræ ovato-reniformes, loculis confluentibus. Stylus apice breviter bifidus, lobo inferiori subdilatato complanato. Flores densè subgloboso-capitati.

Species 1. A. *capitatus* (A. *scariosus* Benth. suprà, fol. 1282 ; *Ocymum capitatum* Roth. ; O. *capitellatum* Linn. ?) 2. A. *villosus*, from Madagascar. 3. A. *Blumei* (*Ocymum acrocephalum* Blume).

98. Anisochilus. *Wall.*—Calyx ovatus, bilabiatus, labio superiori subintegro, post anthesin deflexo, calycem claudente, inferiori truncato. Corolla tubo exserto refracto, fauce subinflatâ, bilabiata, labio superiori 3-4-fido, inferiori integro concavo. Stamina 4, declinata. Filamenta libera, edentula. Antheræ ovato-reniformes, loculis confluentibus. Stylus apice subulatus, æqualiter bifidus. Flores densè imbricato-spicati.

Besides the *Lavandula carnosa* Linn. this genus comprehends two or three new East Indian species.

99. Pycnostachys. *Hook.*—Calyx ovatus, subæqualis, dentibus 5 subulato-spinosis. Corolla tubo exserto subrecto declinato, bilabiata, labio superiori quadrifido, inferiori integro concavo. Stamina 4, declinata. Filamenta libera, edentula. Antheræ ovato-reniformes, loculis confluentibus. Stylus apice subulatus, æqualiter bifidus. Verticillastri densè spicati, spicis simplicibus.

100. Æollanthus.—*Mart. amœn. bot. Monac. p.* 4. *t.* 2.

101. Hyptis. *Jacq.*—Calyx tubulosus, æqualis, dentibus 5 subulato-aristatis. Corolla tubo calycem subæquante, quadrifida, subbilabiata, lobo superiori latiore sæpiùs emarginato, lateralibus integerrimis planis, inferiori concavo. Stamina 4, declinata. Filamenta libera, edentula. Antheræ ovato-reniformes, loculis confluentibus. Stylus apice subæqualiter bifidus. Verticillastri nunc densè globoso-capitati, nunc spicati, racemosi, v. paniculati.

102. Marsypianthus. *Mart.*—Calyx campanulatus, membranaceo-inflatus, 5-aristatus. Corolla tubo calycem subæquante, quadrifida, subbilabiata, lobo superiori latiore emarginato, lateralibus integerrimis planis, inferiori concavo. Stamina 4, declinata. Filamenta libera, edentula. Antheræ ovato-reniformes, loculis confluentibus. Stylus apice subæqualiter bifidus. Verticillastri densè globoso-capitati.

103. Peltodon. *Pohl.*

104 ? Glechon. *Spr. syst. cur. post. p.* 222.

105 ? Dentidia. *Lour. fl. cochin.*

106. Prostanthera. *Labill. pl. nov. holl.* 2. *p.* 18.

107. Cryphia. *Br. prodr.*

108 ? Chilodia. *Br. prodr.*

Barbula. *Lour. fl. cochin.* belongs to *Verbenaceæ*, to which order it appears to me also that *Phryma* Linn. should be referred. I am totally unacquainted with *Vleckia* Rafin, and *Pheboanthe* Tausch, both included by Reichenbach amongst Labiatæ in his *Conspectus*.

In my characters of *Perilla* and *Elsholtzia*, fol. 1282 of the *Register*, the corolla is erroneously described as having the odd division above, instead of below. In *Colebrookia* and *Perilla* the style is deeply two-cleft ; in the other genera of *Menthoideæ* it is, as in most Labiatæ, slightly cleft at the apex.

Elsholtzia paniculata *Willd.* is a true Pogostemon. The genus Elsholtzia remains, therefore, confined to E. cristata. Perhaps my Aphanochilus might be united to it as a second section.

To the Menthoideæ may be added the following genus, which may be placed immediately before Elsholtzia :

Tetradenia *Benth.*—Calyx campanulatus, 5-dentatus, dente superiori latiore, intùs fauce nudâ. Corolla tubo brevissimo, campanulata, 5-fida, lobis ovatis subæqualibus. Stamina 4, exserta, distantia. Antheræ loculis confluentibus, valvulis reflexis. Ovaria intra glandulas 4 recondita. Stylus apice breviter bifidus. — Species unica Madacascariensis T. fruticosa (Mentha fruticosa, *Helsing. et Bojer MS. in herb. Hooker*). Flores spicati, spiculis racemosis, racemis paniculatis.

Cunila *Linn.*, which, at fol. 1289 of the *Register*, I placed in the tribe of Synandreæ, has two, and sometimes (in C. coccinea *Hook.*) four distant stamina, with the anthers distinct, bilocular, and parallel-celled ; and therefore should be referred to Satureineæ, where it may be placed immediately after Origanum.

Dr. Hooker's herbarium contains a plant sent by Mr. Elliott from South Carolina, under the name of *Ceranthera linearifolia*, which forms a very well-marked genus of the same tribe of Satureineæ ; although his name cannot be adopted, as Palisot de Beauvois had long since applied it to a genus of Violaceæ. Mr. Elliott's genus may be thus characterised :

Dicerandra *Benth.*—Calyx 10-nervis, tubulosus, bilabiatus, labio superiori subintegerrimo, inferiori bifido, intùs fauce villosâ. Corolla tubo exserto incurvo, bilabiata, labio superiori brevissimè emarginato, inferiori trifido. Stamina 4, exserta, distantia. Antheræ biloculares, loculis divaricatis saccatis apice dehiscentibus, valvulâ superiori extùs longè cornutâ. Stylus apice subæqualiter bifidus.

The three genera, *Thymus*, *Satureïa*, and *Micromeria* (as limited at fol. 1289), should, I think, rather form but a single genus, which would probably include also *Zygis*, Desv. in Hamilt. prodr. fl. ind. occid.

Gardoquia origanoides Reichenb. in Spr. syst. cur. post. p. 225, is a species of Lantana.

NOTE.

In reply to the observations made at fol. 1290 upon the substitution by Messrs. Frost and Hooker of the name Stanhopea for that of Ceratochilus, the latter has published the following answer in the *Bot. Mag.* fol. 2957.

> " The author of the *Botanical Register*, under tab. 1290, seems to be of opinion that the name Ceratochilus ought to have the preference to that of Stanhopea. But in this he is quite mistaken. Common justice requires me to state, that no character whatever has been given of the former genus, nor any peculiarities mentioned or figured as belonging to it, which could possibly enable me to distinguish it from other Orchideous genera. (See *Loddiges's Bot. Cab.* f. 1414.) In short, it is only a MS. name of Mr. Lindley. Had it been otherwise, or had there been any means of identifying Stanhopea with Ceratochilus, I would most cheerfully have acknowledged its prior claims."

We have too much respect for our friend Hooker to make any ill-natured remarks upon this singular paragraph, much less do we wish to involve either him or ourselves in a dispute about a paltry name. We only regret to see any naturalist of reputation, more especially one for whom we have so much sincere regard, appearing to lend his authority and countenance to alterations in nomenclature, of which he must disapprove as much as we do. With regard to the point at issue, we have to say, that Mr. Loddiges's figure in the *Botanical Cabinet* is sufficient to enable any one conversant with Orchideous plants to recognise the genus; that, *even if this were not the case,* the name of Ceratochilus has nevertheless a right to be adopted;* and that it passes our comprehension how that can be a MS. name which was published many months ago. If Dr. Hooker will look into the *Memoirs of the Natural History Society of Paris*, he will see what the opinion of the French Botanists is of his similar change of M. Bojer's *MS.* name of Joliffia africana into Telfairia pedata.

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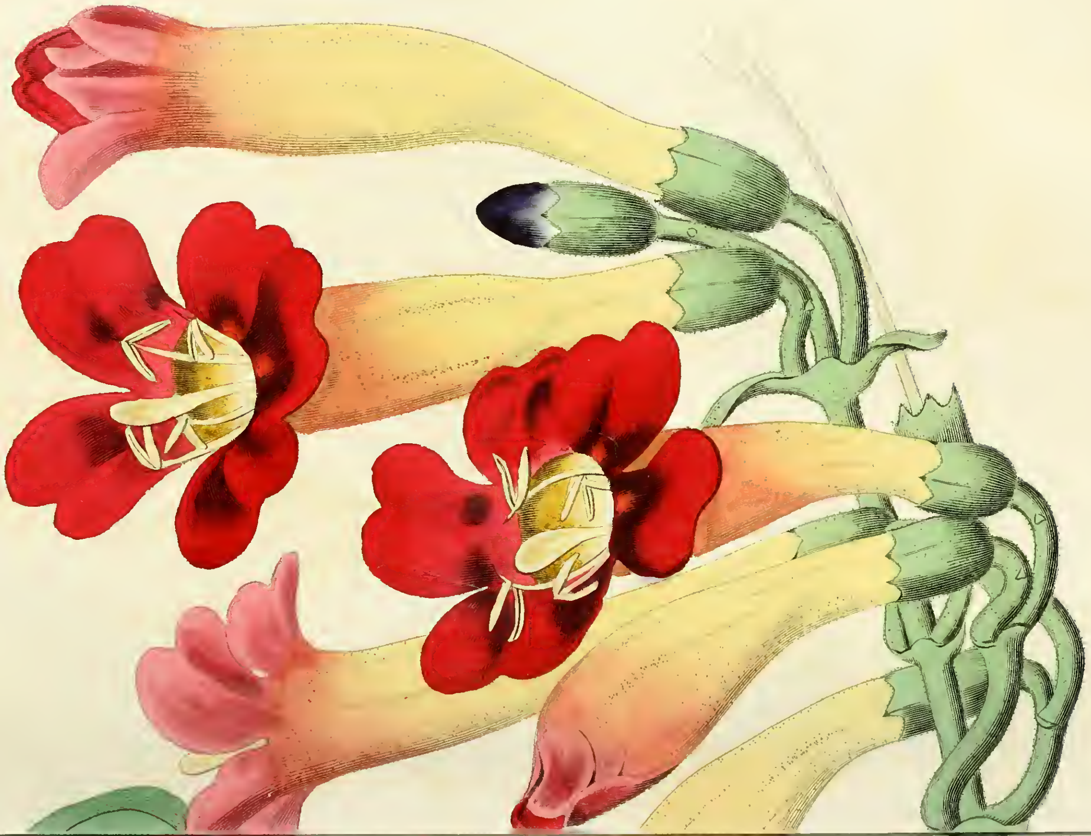
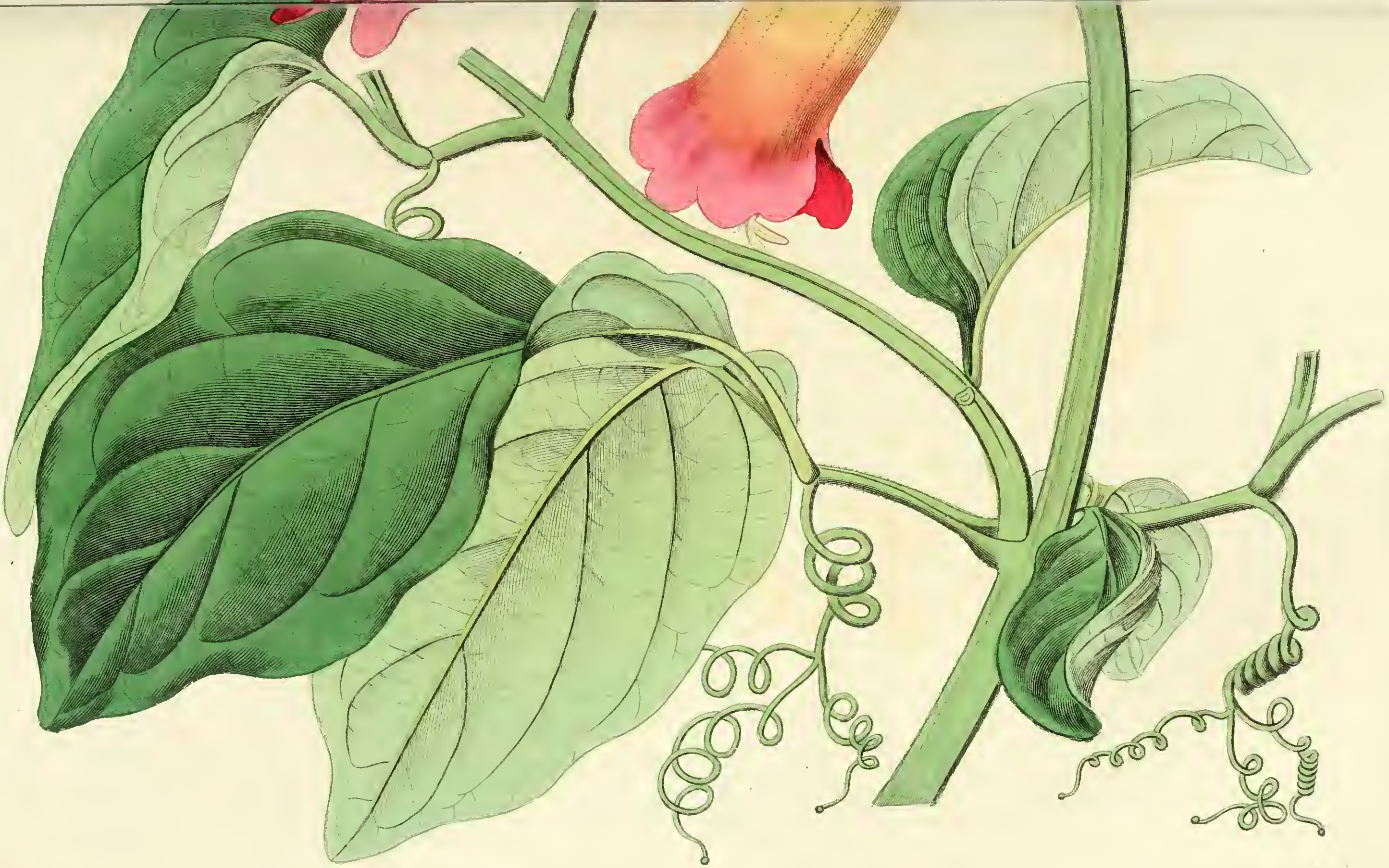
* Nomina generica, quamdiù synonyma digna in promptu sunt, nova non effingenda.— *Phil. Bot.* 244.





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J. Watts sc.

1301

BIGNÓNIA* Cherére.

The Cherere Bignonia.

DIDYNAMIA *ANGIOSPERMIA.*

Nat. ord. BIGNONIACEÆ.
BIGNONIA. — *Suprà, vol.* 3. *fol.* 249.

B. *Cherere;* foliis ternatis binatisque cirrhiferis glabriusculis, foliolis subcordato-oblongis, racemis terminalibus axillaribusque subpaniculatis, calycibus velutinis, corollis tomentosis, ramis angulatis.
B. Cherere. *Aubl. Guian. vol.* 3. *p.* 647. *tab.* 260. *Lam. encycl.* 1. 415.
B. heterophylla. *Willd. sp. pl.* 3. 298. *Pers. syn.* 2. 171. *Spreng. syst.* 2. 831.

Frutex *altè scandens, ramis glabris angulatis.* Foliola *ternata v. binata, foliolo altero in cirrhum mutato, subcordata, oblonga, cuspidata, pellucido-punctata, subtùs petiolisque pilosiusculis.* Racemi *in spontaneâ axillares, in cultâ terminales, nunc paniculati, multiflori, pedicellis pubescentibus; bracteæ deciduæ.* Calyx *campanulatus, truncatus, velutinus, 5-dentatus.* Corolla 2½ *uncias longa, tomentosa, tubo leviter arcuato, limbo 5-partito, laciniis oblongis, emarginatis, subæqualibus.* Stamina *exserta;* filamenta *leviter pubescentia;* antheræ *sagittatæ, lobis divaricatis linearibus, connectivo mucronato.*

For this beautiful species we are indebted to the Right Honourable the Earl of Grenville, from whose Conservatory at Dropmore it was forwarded by Mr. William Baillie, the Gardener, in July last. It is a native of French Guiana, where it was discovered by Aublet. The natives of that country manufacture the flexible shoots of it and B. incarnata into baskets and broad-brimmed hats, which act as umbrellas, keeping off both the sun and the rain; they also use the shoots as cord.

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* In memory of the Abbé Jean Paul Bignon, the librarian of the King of France, born in 1662, died in 1743; the friend of Tournefort, who dedicated this genus to him. Cherere (pronounced kerere) is the name given to the plants by the natives of French Guiana.

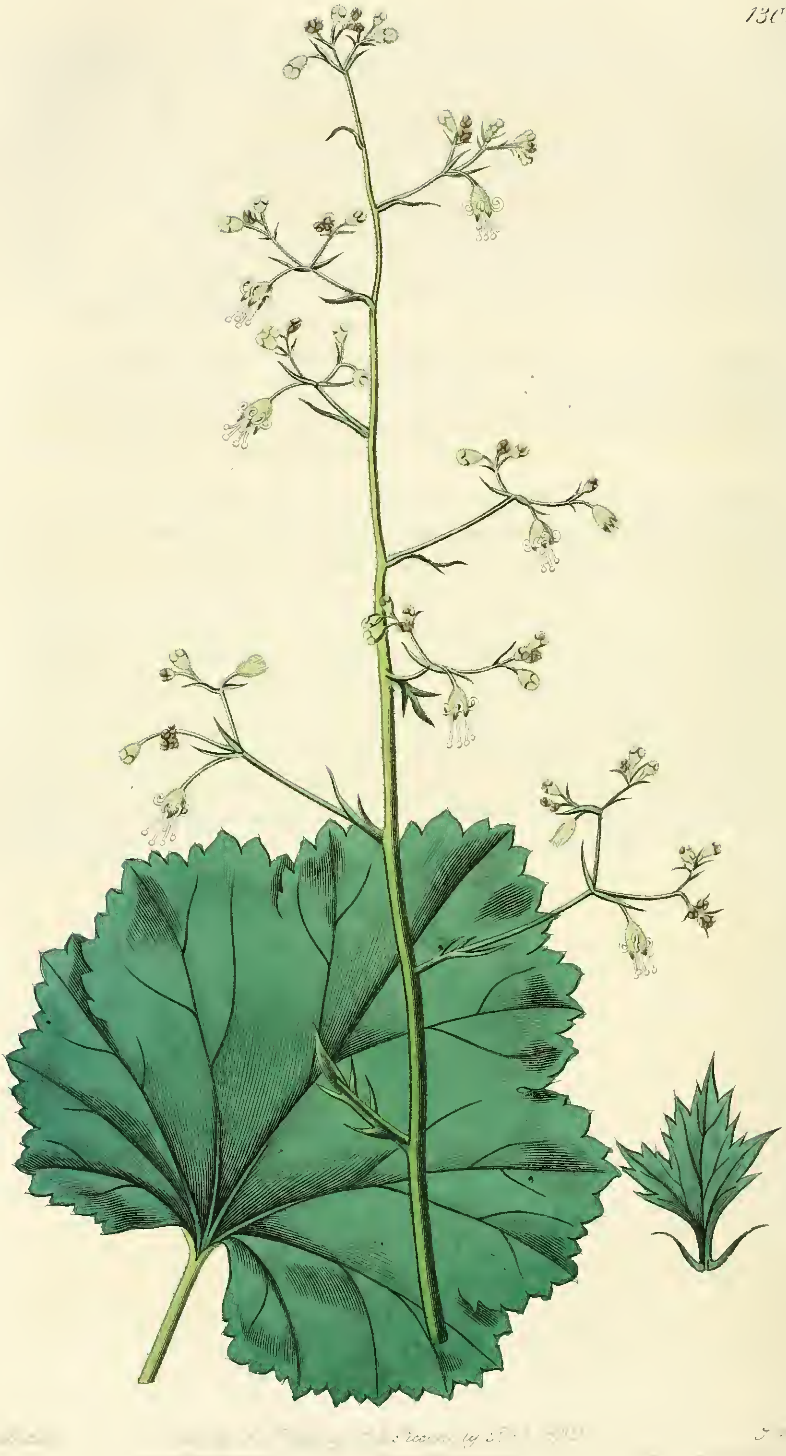
It was named B. Cherere by its discoverer, and was republished under that name by Lamarck in the French *Encyclopædia.* Willdenow, who had never seen the plant, and who, in fact, knew nothing about it beyond what he learned from its previous describers, thought proper, in that abominable spirit of change which characterised the school to which he belonged, to alter the name to heterophylla. It is surprising that naturalists cannot see the evil to which these arbitrary and useless interferences with nomenclature give rise.

A conservatory climber, pre-eminently beautiful among the lovely race to which it belongs. Propagated readily by cuttings, and requiring no particular management beyond that of giving it plenty of room to run.

A climbing shrub, with smooth, angular shoots. *Leaflets* ternate or binate (one of the leaflets being converted into a tendril), somewhat cordate, oblong, cuspidate, with pellucid dots, slightly hairy beneath and on the petioles. *Racemes* axillary in the wild plant, terminal in the cultivated one, sometimes panicled and many-flowered; *pedicels* pubescent, *bracteæ* deciduous. *Calyx* campanulate, truncate, velvety, 5-toothed. *Corolla* 2½ inches long, downy, the tube slightly curved, the limb 5-parted; the segments oblong, emarginate, nearly equal. *Stamens* protruded; *filaments* slightly pubescent; *anthers* sagittate, the lobes divaricate and linear, the connectivum mucronate.

J. L.

1302.



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1302

HEUCHÉRA* micrā́ntha.

Small-flowered Heuchera.

PENTANDRIA *DIGYNIA*

Nat. ord. SAXIFRAGEÆ.

HEUCHERA L.—*Calyx* 5-dentatus, subinæqualis. *Petala* 5. *Stamina* 5, sepalis opposita. *Capsula* birostris, bilocularis, polysperma.

H. *micrantha;* foliis subrotundis cordatis acutè crenatis subquinquelobis petiolis longis caulisque basi sparsè villosis; caulinis incisis, paniculâ coarctatâ, petalis lineari-lanceolatis integerrimis, staminibus exsertis.

H. micrantha. *Douglas in colloquio.*

Herba *perennis, sempervirens, acaulis, cæspitosa.* Folia *subrotundo-cordata, acutè crenata, subquinqueloba, magis minusve pilosa, longè petiolata; petiolis villosis; caulina triloba, incisa.* Caulis *erectus, sesquipedalis, basi subpilosus, sursùm minutissimè glandulosus, ut et inflorescentia omnis.* Panicula *laxa, elongata.* Bracteolæ *subulatæ.* Calyx *obconicus, semi-superus, 5-dentatus, paululùm obliquus.* Petala *minuta, lineari-lanceolata, unguiculata, integerrima.* Stamina 5, *exserta, dentibus calycinis opposita.*

A hardy perennial, found by Mr. Douglas in mountainous woods, near the grand Rapids of the Columbia. With us it flowers in June and July, and propagates readily by division of the roots. Its general habit is quite that of H. americana.

Willdenow, in his papers, has an H. *glabra,* from the North-west coast of North America, the brief character of which in *Römer and Schultes* (6. 216) answers to this in some respects; but the name is inapplicable if that Botanist intended to contrast it with H. americana; and it is probably something else. We have, however, nothing more like it from Mr. Douglas.

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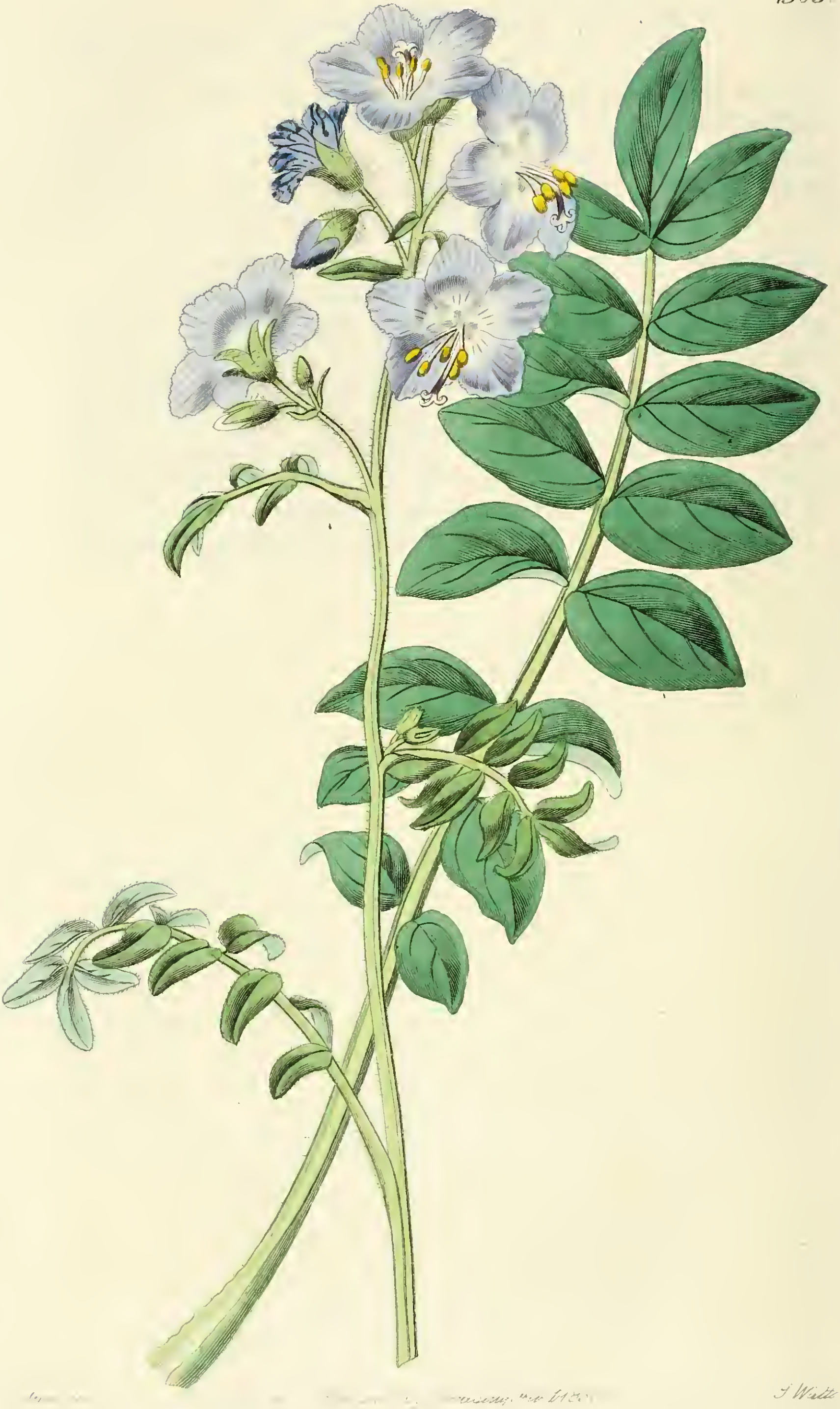
* John Henry Heucher is described as a painstaking professor of Botany at Wittenberg, in the early part of the eighteenth century. He fancied that the tumours on the roots of Hypochæris maculata were so like little mice, that he had found an animal-vegetable analogous to the Barometz or Scythian lamb.

The Mitella pentandra of the *Botanical Magazine* is rightly determined by M. Decandolle to be a distinct genus, to which he has given the appropriate name of Drummondia, in compliment to one of the best collectors and most deserving individuals of the age.

A perennial, stemless, evergreen, cespitose, herbaceous plant. *Leaves* roundish-cordate, acutely crenate, somewhat 5-lobed, more or less hairy, on long footstalks; *petioles* villous; *stem-leaves* 3-lobed, cut. *Stem* erect, a foot and a half high, somewhat hairy at the base, above minutely glandular, as are all parts of the inflorescence. *Panicle* loose, elongated. *Bracteolæ* subulate. *Calyx* inversely conical, half superior, 5-toothed, slightly oblique. *Petals* minute, linear-lanceolate, unguiculate, entire. *Stamens* 5, exserted, opposite the teeth of the calyx.

J. L.

1303.



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J Watts

1303

POLEMÓNIUM* cærúleum; var. *piliferum.*

Common Greek Valerian; hairy variety.

PENTANDRIA *MONOGYNIA.*

Nat. ord. POLEMONIACEÆ.
POLEMONIUM.—Suprà, vol. 6. fol. 460.

P. *cæruleum;* foliis pinnatis, floribus erectis, calycibus corollæ tubo longioribus. *Römer et Schultes*, 4. 364.
P. cæruleum. *Linnæus and others.*
Var. piliferum; *caule suberecto foliis radicalibus vix longiore, calycibus villosis.*

This plant was raised in the Garden of the Horticultural Society, from seeds collected in the last Arctic Expedition, and presented to the Society by Dr. Richardson. Our motive for figuring it is for the sake of recording the differences which exist between it and the common P. cæruleum of Europe, but which appear insufficient to distinguish it as a species.

In the first place, its habit is very different: instead of an erect stem rising high above the radical leaves, we have a plant with a half-recumbent stem, scarcely exceeding the radical leaves; instead of a short, dense pubescence upon the calyx, we have numerous long loose hairs, which are well represented in the plate: but with this peculiarity of habit, and slight difference in the calyx, the distinction ceases; and even these become difficult to seize when the plant is dried. Possibly in its native place it was a transition from the ordinary form of Pol. cæruleum to that singular state of the same species called P. cæruleum *var.* nanum by Dr. Hooker, in his account of Captain Sabine's Spitzbergen plants; and when cultivated, it was reverting, even in the first generation, towards the stock from which it originally sprung.

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* What that plant may have been which was of such importance as to cause a feud between two kings, each of whom claimed the merit of its discovery, and which finally was named, in commemoration of the struggle, πολεμώνιον, or the War-causing, we know not. Sprengel considers the plant of Dioscorides to be the same as the modern Polemonium cæruleum; but if so, this classical war, like many of a more modern date, was for a very worthless object.

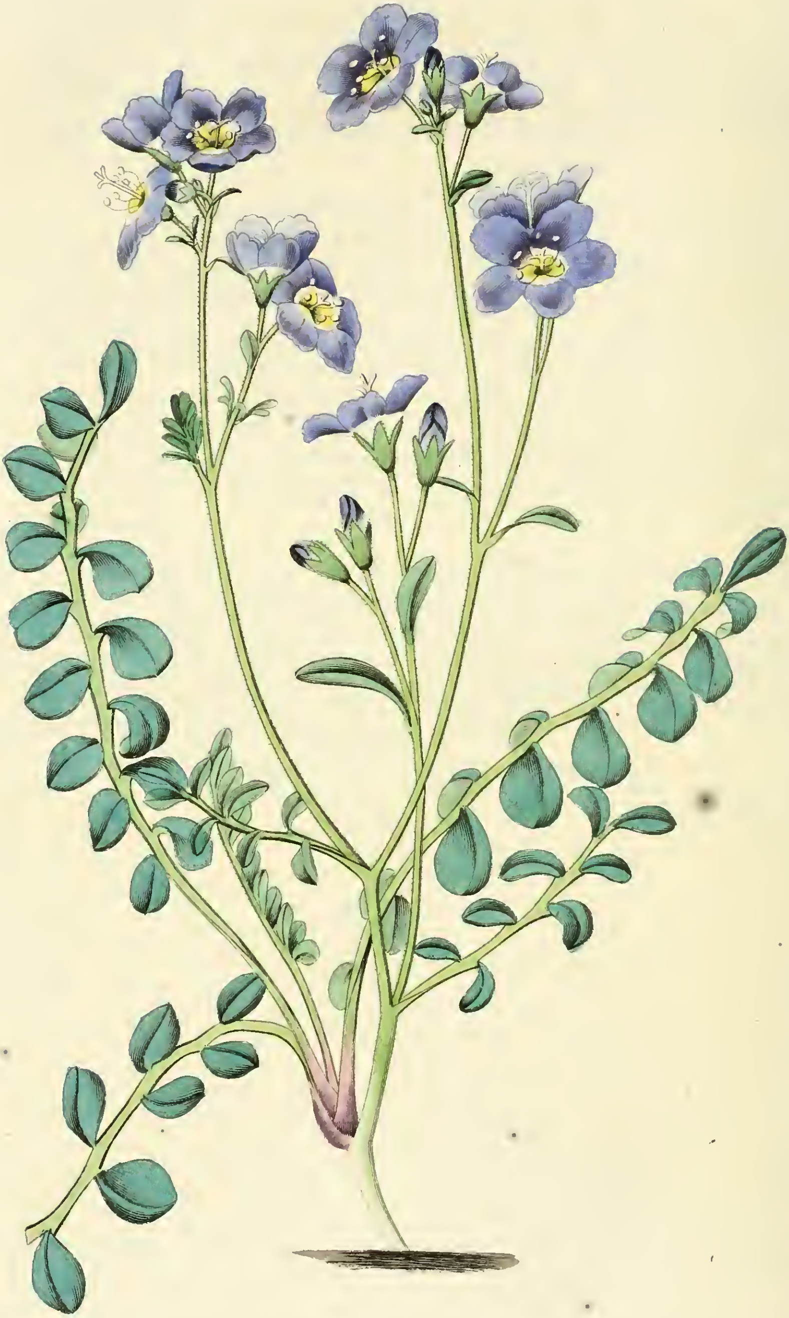
The meagre definitions of P. cæruleum in books are wholly insufficient to point out that common species to a person unacquainted with it. We have not, however, attempted to improve them, because the whole genus and order are in a miserable state of confusion; and it is not worth while beginning to reform them, without completing the task,—for which we have neither leisure nor materials. It appears to us that, exclusively of habit, the great distinction of P. cæruleum consists in the number and form of its leaflets, and in the figure of the calyx, rather than in any thing else.

Our drawing was made in the Garden of the Horticultural Society in August last year. It represents the leaves with their leaflets broader and shorter than they usually are, the specimen having been taken from among the outermost of the radical leaves: the greater part of the foliage differs in no respect from that of Pol. cæruleum.

A hardy biennial, propagated by seeds.

J. L.

1304



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POLEMÓNIUM* húmile.

Humble Greek Valerian.

PENTANDRIA *MONOGYNIA.*

Nat. ord. Polemoniaceæ.
POLEMONIUM.—Suprà, vol. 6. *fol.* 460.

P. *humile;* foliis pinnatis, petalis obtusis, staminibus sagittatis. *Willd. MSS. ex Römer et Schultes,* 4. 792.

Herba *prostrata, foliis pinnatis subpubescentibus, foliolis* 17-25, *ovato-subrotundis, subalternis.* Caules *leviter pubescentes.* Flores *erecti v. leviter nutantes.* Pedicelli *subpubescentes.* Calyx *campanulatus, subpubescens, quinquefidus, tubo corollæ subæqualis.* Corolla *glabra, lobis rotundatis, patentibus.* Stamina *è squamis pubescentibus exorta.* Antheræ *ovatæ, basi obtusè sagittatæ.*

Raised with the preceding, and from the same collection of seeds; it flowers at the same time, and appears to be perennial; but of this latter point we cannot judge with accuracy until another season.

The only place in which we find it described is in the Supplement to the fourth volume of Römer and Schultes' *Species Plantarum,* where it is inserted with a definition which, as far as it is intelligible (for what are *stamina sagittata?*), applies as well to P. cæruleum, or mexicanum, or reptans, but with a good description, made from a specimen of Pallas, collected in Eastern Siberia. Hence the species appears, like many other Siberian plants, to be common to both sides of the Northern Pacific; for the space between the part of Eastern America, where it must have been found by Dr. Richardson's party, is filled up by the discovery of it on the western side of America by Mr. Douglas, in whose herbarium it is called P. gracile.

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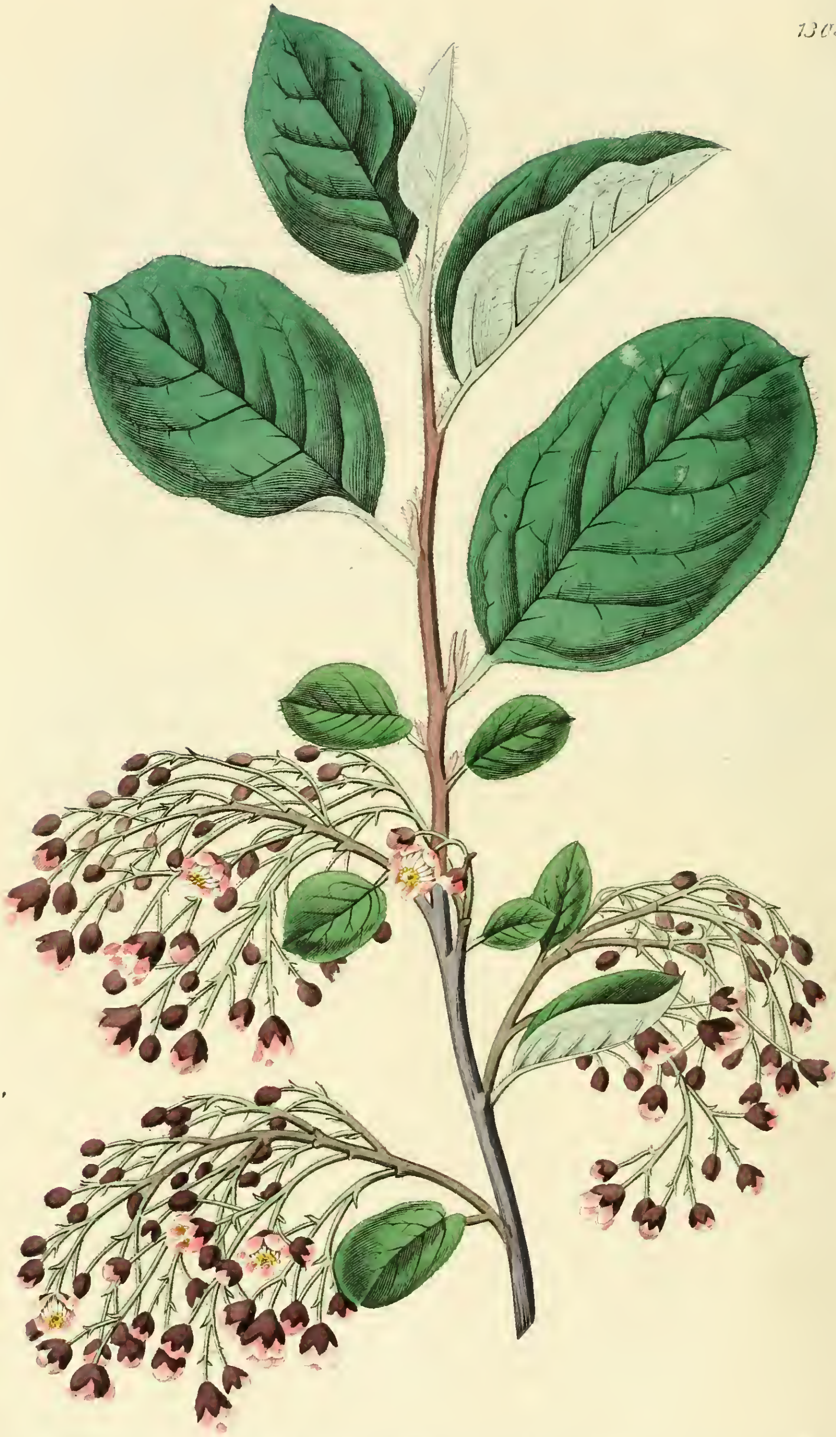
* See fol. 1303.

It appears to be affected very much in pubescence by situation and soil; the garden plant was 1½ foot high, with stems as thick as a goose-quill; Mr. Douglas's specimens are chiefly about half the size, much more slender, covered with far more numerous flowers, and not differing in degree of pubescence from the garden plant: but we have from his collection a specimen not more than six inches high, the stems and calyxes of which are densely pubescent, or even villous. This last probably connects the species, as represented in the accompanying plate, with Dr. Graham's Pol. Richardsonii; unless that plant should be really distinct from P. humile, which Dr. Hooker, in publishing it, seems to doubt, and which we think improbable. We are, however, persuaded that the little plant with fine blue flowers, found by Captain Sabine on the east coast of Greenland, was rightly referred by Dr. Hooker in the first instance to Pol. cæruleum, and is not a state of this species, as the latter skilful Botanist subsequently felt inclined to suppose. See *Botanical Magazine,* t. 2800.

Our drawing was made in the Garden of the Horticultural Society in August last. It should be cultivated in poor, gravelly soil, which is not dry: under such management it becomes much more beautiful than if grown in rich garden soil.

J. L.

1305



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COTONEÁSTER* laxiflóra.

Loose-clustered Cotoneaster.

ICOSANDRIA *DI-TRIGYNIA.*

Nat. ord. POMACEÆ.
COTONEASTER. — *Suprà, vol.* 13. *fol.* 1114.

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§ *Folia decidua.*

C. *laxiflora;* cymis paniculatis pilosis, foliis oblongis utrinque obtusis subtùs lanatis deciduis.

C. laxiflora. *Jacq. fil. in litteris. Lindley, suprà, fol.* 1229.

Rami *fusco purpurei, epidermide cinereâ deglubente.* Folia *oblonga, v. ovata, obtusa, suprà glabra, subtùs albo lanata.* Pedicelli, *oculo armato, pilis tenuissimis raris deciduis vestiti.* Calyces *glaberrimi.*

A hardy shrub, raised in the Garden of the Horticultural Society, from seeds sent by Professor Jacquin, under the name which is adopted. We have not been able to trace it in any work upon the European Flora, and are unacquainted with its native place. Flowers in April. Our drawing was made last year in the Garden of the Horticultural Society.

Branches brownish purple, with an ash-coloured cuticle, which peels off. *Leaves* oblong or ovate, obtuse, smooth above, white with down beneath. *Pedicels,* if viewed with a lens, seen to be covered with very thin, deciduous, silky hairs. *Calyxes* quite smooth.

J. L.

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* See fol. 1187.

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